The Mining Journal
RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 749.—Vol. XIX.] LONDON, SATURDAY, DECEMBER 29, 1849. [Price 6d.

CAMBORNE—MINE AND MATERIALS FOR SALE.

MESSRS. RICHARDS & PRYOR respectfully announce that AN AUCTION will be HELD on Monday, the 14th day of January next, at Two o'clock in the afternoon, at Mathews's Hotel, in CAMBORNE, in the county of Cornwall, for SELLING, for the residues of the several terms now subsisting therein, under the existing setts granted by the lords of the soil, all that COPPER MINE, or ADVENTURE, called or known by the name of

SOUTH ROSKEAR,

situate in CAMBORNE, in Cornwall, and extending upwards of a mile in length on the course of the lodes, a very considerable portion of the limits of which is unexplored, and which mine is contiguous to or surrounded by some of the most productive mines in Cornwall, being within a short distance of, and bounded on the east by, East Wheal Crofty; on the north by North Roskear; and on the south by Dolcoath and Camborne Consols—all of which have yielded large profits to the adventurers for many years, together with the carpenters' and smiths' shops, engines, machinery, and materials belonging to the mine, comprising TWO STEAM-ENGINES, of 60 and 35-inch cylinders; TWO STEAM WHIMS, of 20 and 16-inch cylinders; TWO HORSE WHIMS; about 350 fms. of PITWORK, with all requisite and necessary machinery and materials.

The mine is at present divided into 114 shares, and has been worked for 26 years and upwards, during which large profits have been realised.

The limits of the setts have been recently extended, which has rendered the erection of a new steam-engine necessary, and some of the adventurers being unable to contribute the requisite amount for carrying out the new workings, the adventurers have been compelled to offer the entire mine for sale. Its position and contiguity to the several mines referred to, offers a fair inducement to speculators.

Any information that may be desired will be furnished by the agents at the mine, who will show the workings, and the conditions of sale may be inspected prior to the auction, and any further particulars had on application at the offices of Messrs. John Rodd and Darke, solicitors, Penzance, Cornwall.

Dated Dec. 26, 1849. 1

TO RAILWAY COMPANIES.—TO BE SOLD, BY AUCTION, at the Leeds Terminus of the North Midland Railway, LEEDS, that celebrated PATENT NEW LOCOMOTIVE ENGINE and TENDER, known as the "SANSPAREIL," manufactured by Mr. Timothy Hackworth, Soho Engine Works, Shelden, near Darlington. It will be recollected that this locomotive engine was noticed by a correspondent of the *Mining Journal*, Sept. 15th, 29th, and October 13th, 1849, on account of her great economy in fuel, speed, and power, combined with a superiority of design and unequalled workmanship. The engine belongs to the kind called first-class coaching engine: the cylinders are inside of the smoke-box, working to a crank-shaft, the bearings of which are carried by an inner frame, formed of a wrought-iron slab, varying from 1¼-inch thick at the fire-box end to ⅝-inch at the smoke-box: she is carried on six entire malleable iron round-spoked wheels, driving wheels, 6 feet 6 inches diameter, leading and trailing wheels, 4 ft. diameter, 13 ft. 6 in. centre and centre, and having their bearings in the outer frame, which, together with the axle guards, is formed of a wrought-iron plate, 1 inch thick. The boiler is a novelty in its manufacture, being made of bowling plates, welded together with solid angle irons for joining to fire-box and smoke-box. It contains 221 brass tubes, 10 feet 7 inches long, 2 inches external diameter, with copper fire-box. Total amount of heating surface about 1300 feet—diameter of cylinder 15 inches, stroke 22 inches—weight, with the steam up, 23 tons 15 cwts. 2

The water tank is carried on six entire malleable iron round-spoked wheels, 3 ft. 6 in. diameter, contains upwards of 1500 gallons of water, and is provided with a powerful rack and pinion screw brake, capable of locking all six wheels; the outer frame is of malleable iron, 1 in. thick, with the axle guards in one piece with the frame plate. We can say, without fear of contradiction, that this locomotive engine is the most economical extant. After a course of careful experiments on the York, Newcastle, and Berwick Railway, also on the Midland Counties, it has been proved that the amount of saving effected, at the lowest estimate, is 25 per cent. below the best engines of the present day. This great economy is effected by a new modification of the slide valves, which the manufacturer has recently secured by letters patent.

This locomotive engine evinces superiority in design and general construction, with considerable finish in the manufacture, which, together with the great economy exhibited in the consumption of fuel, and the celebrity she has attained on those railways on which she has experimented, combined with the high character of the manufacturer, as one of the earliest engineers, whose long standing and extensive experience in the construction and manufacture of locomotive engines, cannot fail to recommend her as a desirable purchase to any railway company.

The sale will commence at 2 o'clock on Thursday, the 31 of January, 1850. A person will be in attendance two or three days before the day of sale, who will show the engine, and give further information.

Soho Works, Sheldon, near Darlington, December 27, 1849.

ATMOSPHERIC AND LOCOMOTIVE ENGINES FOR SALE.

MR. STARLING is instructed by the Directors of the LONDON AND BRIGHTON RAILWAY COMPANY to Dispose of those HIGHLY-FINISHED ENGINES, by Messrs. MAUDSLY & Co., lately used on the ATMOSPHERIC RAILWAY.

Mr. S. has also for disposal several new and second-hand SIX and FOUR-WHEELED LOCOMOTIVES—particulars on application at his office, 13, Change-alley.

London, November 14, 1849. 3

IMPORTANT TO CAPITALISTS.

VALUABLE SLATE VEIN IN THE MARKET.—The Proprietor of a valuable SLATE VEIN, or BED, covering an area of 63 acres, one-fourth of a mile in width, and rising to an altitude of fully 900 feet (the property of which is freehold), is desirous of obtaining a PURCHASER for the SAME, who will be allowed advantageous terms, with an assured certainty of ample returns for the needful expenditure required for carrying on extensive operations; and which, from the nature of the slate formation—stratum rising over stratum—ample space (with a deep fall) for rubbish deposit, free drainage, dispensing with the usual adjunct machinery, will not necessarily reach a tenth-part of the average working outlay of the generality of slate quarries. The Slate Vein, to which attention is drawn in this advertisement, is situated on the margin of a navigable lake, in Carnarvonshire, North Wales, within six miles (four of which is the post-road) of an excellent shipping port. 4

Carnarvonshire is noted as the great emporium of the slate trade, which affords constant and lucrative employment to thousands, at the same time enriching the proprietors.

The surveys of three eminent engineers have been followed up by reports of a highly satisfactory character as to the quality and quantity of this eligible slate formation, and may be had, with a view of the plan and sections, on application to Griffith Davies, Esq., Guardian Insurance Office, London; or Mr. W. Dew, surveyor, Llangefin, Anglesea.

SEA SALE COLLIERY TO BE LET, and ENTERED at MAY next—All that valuable and CURRENT-GOING COLLIERY, situated on the SOUTH BANK of the TYNE, at JARROW, in the county of Durham, containing the BENSHAM and LOW MAIN SEAMS of COAL in great perfection. The colliery is fitted up on the most improved manner, and may be undertaken with a very moderate capital.—For particulars apply to Mr. Matthias Dunn, colliery viewer, Newcastle-on-Tyne, or to Mr. Matthew Liddell, viewer, Benton Grange. 5

Newcastle-on-Tyne, Dec. 26, 1849.

TO COAL AND IRONMASTERS.—The PROPRIETOR of an extensive range of several SEAMS of very superior COALS, on the borders of DERBYSHIRE, with the most favourable means of transit to the best market in the realm, both by railway and canal, each within a few hundred yards, is now prepared to LEASE the SAME on favourable terms. The above will be found most desirable, as a sufficient market already exists for an immense quantity of them.—Also, an EXTENSIVE RANGE of IRONSTONE may BE LET with the SAME, if desirable.

For particulars of the same, application may be made to "R. C." at the office of the *Mining Journal*, 26, Fleet-street, London. 6

STRUVE'S PATENT MINE VENTILATOR

Cost—£150.

TO COLLIERY PROPRIETORS.

Quantity of air passed through a Mine almost unlimited, to the extent of 200,000 cubic feet per minute, if necessary—depending on size of apparatus.

COST of an APPARATUS to produce a ventilation of 30,000 cubic feet per minute, ONE HUNDRED and FIFTY POUNDS, exclusive of patent right. This amount of ventilation would be sufficient for a mine working 150 tons per day, provided it was not very fiery; in which case it would be desirable to provide for 30,000 cubic feet of air per minute. The capabilities of the Ventilator may be doubled at any future time, at a comparatively small cost. 7

The Ventilator has been at work for upwards of six months at the Eaglesbush Colliery, near Neath, working under a rarefaction of 2½ to 3 inches of water, which demonstrates the impracticability of furnace ventilation, when the shafts are shallow and the airways small.—It is practical to rarify a mine by this ventilator to the extent of 2 feet of water, or 2 inches of mercury.

LICENSES will be GRANTED on application to

Mr. WILLIAM PRICE STRUVE, Swansea,
Civil Engineer and Mineral Surveyor.

OILS.—BROTHERTON & CO. beg to call the attention of all parties EMPLOYING STEAM POWER to their PATENT PURIFIED OILS, for the economical working of STEAM-ENGINES and MACHINERY and BURNING IN LAMPS. The adoption of its use effects a saving of 25 per cent. over any other oil, and its properties are such as to greatly preserve machinery bearings. 8

BROTHERTON & CO.,
HUNGERFORD-WHARF, CHARING-CROSS, LONDON.

THE MINING ALMANACK for 1850: compiled and arranged by HENRY ENGLISH, Mining Engineer, &c. Under the especial sanction and patronage of H.R.H. PRINCE ALBERT, Lord Warden of the Stannaries, Chief Steward of the Duchy of Cornwall, Devon, &c.—THE SECOND VOLUME will appear early in JANUARY next, with ADDITIONAL TABLES and STATISTICS, connected with the Mining Interests.—Names of subscribers are requested to be addressed to Mr. H. English, 38, Fleet-street. 9

JOSEPH DEELEY, of the LONDON and NEWPORT IRON-WORKS, NEWPORT, MONMOUTHSHIRE, respectfully recommends to the notice of the public his PATENT FOUNDRY FURNACE, which has been effectually tested, and is now in constant use at the above works, where it may be inspected by all persons interested. This furnace operates without the aid of any motive-power to impel the air. An immense saving is the consequence, both in erecting and working. One-third of the coke usually required is more than sufficient; a loss of only 22 lbs. to the ton being sustained in smelting.

The IRON MELTED in this furnace also undergoes an extraordinary improvement in quality. 10

SCOTCH PIG and SCRAP are returned equal to the best cold-blast in point of strength, and capable of being chipped or filed with the greatest facility.

FOUNDRIES USING the FURNACE may exist in the most densely populated cities, without causing the least nuisance—all smoke, dust, and noise being entirely avoided.

The FOREIGN PATENT RIGHTS of the above are FOR DISPOSAL, affording capitalists the most favourable opportunity for profitable investment.

APPLY TO THE PATENTEE AS ABOVE.

CWMBRAIN PATENT IRON REFINERY.—The PROPRIETORS of IRON FORGES and MILLS are respectfully INVITED to MAKE TRIAL of Mr. BLEWITT'S REFINED IRON, or METAL, PREPARED by a

NEW PATENT PROCESS,

whereby the IRON is completely FREED from the IMPURITIES CONTRACTED in the BLAST-FURNACE, and, by judicious mixtures, rendered applicable to every kind of manufacture. Heretofore, the metal usually sold in the market has been produced from the worst pigs, scraps, and refuse of some particular blast-furnace, or set of furnaces, without any mixture, or any regard to quality, or the purpose for which it might be required. The PATENT METAL is PREPARED ON SYSTEM, and TO ORDER, for any of the following purposes:— 11

1. For BOILER and TANK-PLATES.
2. For TIN-PLATES, commonly called COKE-PLATES.
3. For STRONG CABLE BOLTS, RIVET, and ANGLE IRON.
4. This COMPOUND PUDDLED, beat under the hammer into a bloom, reheated, and rolled into a 6 or 6½-inch bar, makes TOPS and BOTTOMS for FLANCH and OTHER RAILS, of very superior quality, and attended with less waste than any other kind of iron used for that purpose. It is also well adapted for nail-rods, horse-shoes, and for other ordinary uses of the blacksmith.

The PATENT METAL is marked with a squirrel, and the initials "R. J. B.," and is to be had only at the "Cwmbrain Iron-Works," near Newport, Monmouthshire.

WIRE ROPE.—The Undersigned beg to inform the public, that they have become SOLE LICENSEES of Mr. ANDREW SMITH, for the MANUFACTURE and SALE of his PATENT WIRE ROPE; and having fitted their premises with his very superior improved machinery, have only to assure those who may favour them with their orders, that the same care and attention shall always be bestowed which they have reason to believe, has secured them such general support. 12

LIGHTNING CONDUCTORS, SIGNAL CORD, and SASH LINE, always in stock.

WILKINS & WEATHERLY.

Patent Wire Rope Works, No. 39, High-street, Wapping, London.

TO THE OWNERS OF COLLIERIES, MINES, PLANTATIONS, SAW-MILLS, &c. 13

IMPROVED CIRCULAR SAWS, MILL-SAWS, FILES,

Machine Irons, and Cutting Knives, Steel in Blister, Bar, Cast, Shear, and Drift Steel, Springs for Railways and Common Roads, Iron Washers, Bolts, Hammers, &c., on the most PERFECT and ECONOMICAL PRINCIPLES, MANUFACTURED with DISPATCH, by

BLAKE AND PARKIN,
THE MEADOW STEEL-WORKS, SHEFFIELD.

HAIG'S PATENT VENTILATOR AND CONTINUOUS BLAST-BLOWER. 14

DEPOT—No. 89, MINORIES.

This APPARATUS is confidently recommended to the notice of Proprietors of Mines, Shipowners, Engineers, Smiths, &c., being a most effectual form of VENTILATION for MINES, SHIPS, BUILDINGS, &c., and at the same time a powerful and economical FURNACE AND FORGE BLOWER.

For description of the machine, vide *Mining Journal* of November 17, 1849.

INDURATED AND IMPERVIOUS STONE, CHALK, &c.—AGENTS, with capital, are WANTED in all TOWNS to SUPPLY (under British and Foreign Patents) the great demand for HUTCHISONISED MATERIALS—hard as granite, impervious to moisture, vermin, &c.; the cheapest and most durable for all buildings, hydraulic, paving, monumental and decorative work.—The profits are large. Apply to HUTCHISON & CO., 15

140, Strand, London; or Tunbridge Wells, Kent, and Caen, Normandy, stating name, address, and capital at command.

N.B.—Houses cured of damp. The produce of soft stone quarries, chalk, plaster of Paris, wood, pasteboard, and all absorbent materials indurated to resist frost, vermin, &c. *LICENCES GRANTED.*

CERRO DEL BOTE MINING COMPANY. 16

(Provisionally Registered under 7 and 8 Victoria, cap. 110.)

Capital £50,000, in 5000 shares, of £10 each, payable in four instalments.

The object of this company is to PROSECUTE and EXTEND the WORKS in the valuable SILVER MINES of the CERRO DEL BOTE, in the State of ZACATECAS, MEXICO, the drainage of which, by steam-power, being now completely established and effectual, the capital will be devoted to works of discovery and opening fresh ground—the present extraction of ores paying every other expense of the mine.

Prospectuses and every information can be obtained at the office of the company, No. 13, Austinfriars; or at that of John Taylor, jun., Esq., No. 6, Queen-street-place, Upper Thames-street—at either of which places applications for shares (addressed to the committee) may be made.

CERRO DEL BOTE MINING COMPANY.—PERSONS desirous of TAKING SHARES in this COMPANY are requested to make early application, as the subscription list will shortly be closed. 17

WEST POLGOOTH TIN MINING COMPANY. 18

Capital £12500, in 2500 shares, of £5 each.

CONDUCTED ON THE COST-BOOK SYSTEM.

Deposit £1 per share.

OFFICES, 15, OLD BROAD-STREET.

This valuable MINERAL PROPERTY is that portion of the unworked ore ground in a line between the Great Hewas and the Great Polgooth Mines: in extent it is about three-quarters of a mile on the course of the lodes, and its mean breadth half a mile—held under a lease of 21 years from Lord Mount Edgecombe, at 1-18th dues. The Hewas Mine returned from one lode the greatest quantity of tin in the time of any mine in the kingdom. Polgooth is now making, at a large profit, returns of nearly £3000 per month; both these mines are more than 110 fathoms deep. West Polgooth Mine is only down 34 fathoms—consequently there remains above 70 fathoms of virgin ore ground for the present company to return before they reach the level of the adjoining mines, and which is computed to be sufficient to employ 800 persons for 20 years to come. The tin is of a very fine quality, and with an outlay of £6000, 35 tons of tin per month may be returned, yielding a profit of 25 per cent.

The management is by a London committee, and the works on the mine prosecuted at the lowest possible cost.

A prospectus, with lithograph plan and section attached, may be had by applying to Mr. Robert Williams, the purser, at Mr. Richardson's offices, 15, Old Broad-street, where the Cost-book, containing the names of the directors, the rules, reports, specimens, working plans, &c., may be seen, and of whom full particulars may be known.

Only 1000 shares more are to be issued, and which will be open to the public till the 20th of January ensuing.

LAMHEROOE WHEAL MARIA.—A General Meeting of shareholders of this mine was held at the offices, 4, King-street, Cheapside, on Thursday, the 27th instant, 19

GEORGE EDWARDS, Esq., in the chair,

When the following resolutions were passed unanimously:—

That the very able report on the mine, and on the district generally in which it is situated, by Mr. Adam Murray, jun., be printed, and a copy sent to each adventurer, together with the report of Captain Tabb, dated 26th December.

That the best thanks of the shareholders be given to Mr. Murray for his very able report, and for the services he has rendered them by the inspection of the mine, and that the committee of finance be empowered to arrange with Mr. Murray to superintend the future working of the mine.

That the working of Lamheroce Mine be continued.

That a call of £2 per share be now made, of which 10s. per share be payable to the bankers, as usual, on or before the 10th January next, 1850, and the remaining 30s. per share in three equal instalments of 10s. each every four months.

That any share in arrear of call on the 10th January next, 1850, be absolutely forfeited.

That the balance-sheet presented by the secretary, and read to the meeting, be received, subject to the usual audit.

The thanks of the meeting having been passed to the chairman, the meeting separated.

JAMES CROFTS, Secretary.

WICKLOW COPPER MINE COMPANY.—The stated HALF-YEARLY MEETING of the company will be HELD at their office, 10, Leinster Chambers, 48, Dame-street, on Thursday, the 10th January, 1850, at the hour of half-past Two o'clock P.M.—Dublin, Dec. 27, 1849. 20

The under-mentioned Thirteen Debentures of the Wicklow Copper Mine Company having been Lost or Mislaid, the Public are Cautioned against the Purchase of them. A stop has been put thereon at the office of the company, 43, Dame-street.

2401 to 2404, 2405 to 2408, 2409 to 2412, 2413 to 2416, 2417 to 2420, 2421 to 2424, 2425 to 2428, 2429 to 2432, 2433 to 2436, 2437 to 2440, 2441 to 2444, 2445 to 2445, 2449 to 2452.

Dublin, Leinster Chambers, 43, Dame-street.

WANTED,—A SECOND-HAND STEAM-ENGINE, of 60 to 80-horse power, suited to driving MILLWORK, of plain but good workmanship, with or without boilers.—Apply, with particulars, to James Spence, No. 3, Exchange-buildings, Liverpool. 21

TO CAPITALISTS—SEVERAL ADVANTAGEOUS INVESTMENTS.—For particulars apply by letter, from principals only, to David Mushet, Esq., care of Messrs. S. and W. Meymott, solicitors, No. 86, Blackfriars-road, London. 22

A COMMISSION AGENT at WOLVERHAMPTON, with a first-rate CONNECTION amongst MERCHANTS and FACTORS, having a good MARKET for the SALE of COKE TIN-PLATES, is desirous of OBTAINING a COMMISSION for THEIR SALE, from some respectable manufacturer.—Address to "B. B.," Post-office, Wolverhampton. 23

CIVIL ENGINEERING.—WANTED, a TURNOVER PUPIL from the country. He must be a good draughtsman, and acquainted with the general routine of an office. If well conducted, future employment will be provided.—For terms apply by letter, to "N. P.," office of *The Builder*, 2, York-street, Covent-garden, London. 24

CIVIL ENGINEERING PUPIL.—A GENTLEMAN, of high standing in the profession, has instructed the directing engineer of his establishment to RECEIVE a YOUNG GENTLEMAN of talent as an ARTICLED PUPIL. He must reside with the directing engineer, and from him will receive every advantage afforded by the metropolis in the attainment of professional knowledge, and, if found deserving, on the completion of his indentures, will be provided with an appointment; his domestic comforts will be amply attended to, and the terms may be known on application to "D. E.," 21, Catherine-street, Strand, London. 25

CAMBORNE CONSOLS COPPER MINES, CAMBORNE, CORNWALL.—OFFICES REMOVED to No. 22, NEW BRIDGE-STREET, BLACKFRIARS.—London, Dec. 22, 1849. H. L. T. VON USTER, Secretary. 26

COURT GRANGE SILVER-LEAD MINES, CARDIGANSHIRE.—OFFICES REMOVED to No 22, NEW-BRIDGE-STREET, BLACKFRIARS.—London, Dec. 22, 1849. H. L. T. VON USTER, Secretary. 27

MINING PROPERTY.—Mr. JAMES HERRON, MINE AGENT, 33, CLEMENTS-LANE, LOMBARD-STREET, has received instructions to DISPOSE of SHARES in FIRST-CLASS MINES, paying regular dividends, and yielding to the purchaser from 17½ to 25 per cent. upon his outlay. He is also in a position to transact business in the following—viz.: South Tolgus, Cook's Kitchen, East Buller, North Roskear, Trelawny, Holmbush, Treviskey, South Frances, South Basset, Trethellan, Kirkcudbright, Treleigh, Tincroft, St. John del Rey, Altan, and National Brazilian Mines. 28

MR. T. A. READWIN, MINING OFFICES, 2, *WINCHESTER-BUILDINGS, OLD BROAD-STREET, LONDON.* 29

MR. H. B. RYE, has BUSINESS to transact, both as BUYER and SELLER in all the leading MINES in Cornwall, Devon, and Wales. For particulars, apply at his office, 77, Old Broad-street, City. 30

MR. R. TRIPP, MINING AGENT and SHAREBROKER, *BEDFORD CHAMBERS, BAMPFYLDE-STREET, EXETER.* 31

MR. C. S. RICHARDSON, CIVIL ENGINEER, LAND AND MINING SURVEYOR. *No. 15, OLD BROAD-STREET, LONDON.* 32

JAMES LANE, MINING SHARE DEALER, 80, *OLD BROAD-STREET, LONDON.* 33

ANGLO-MEXICAN MINT OFFICE, 5, Broad-street-buildings, 28th December, 1849.—NOTICE.—A SPECIAL GENERAL MEETING of shareholders in this company will be HELD at the office, as above, on Tuesday, the 8th day of January next, for the purpose of declaring a dividend on the shares of the said company.—The chair to be taken at One o'clock precisely. 34

G. B. LONSDALE, Secretary.

BLAENAVON IRON AND COAL COMPANY.—The INTEREST on the DEBENTURES in this company, payable half-yearly, may be RECEIVED on application at these offices on and after the 5th of January next, between the hours of Eleven and Three o'clock. By order of the board,

Offices, 4, Pancras-lane, Dec. 14, 1849. JAMES BOOTH, Secretary. 35

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of the Proprietors of this Association will be HELD, in conformity with the Deed of Settlement, at the offices of the Company, 26, Austinfriars, on Tuesday, the 8th day of January, at One o'clock precisely. 36

On that day two directors—viz., Russell Ellice and Walter Shairp, Esqrs., and one Auditor, Alexander Druce, Esq., will go out of office by rotation, agreeably to the Deed of Settlement, but are immediately re-eligible, and are candidates for re-election.

It is necessary that persons intending to offer themselves as candidates for the direction and auditorship should leave notice of such their intention with the secretary, at the office of the company, 26, Austinfriars, at least 14 clear days before the day of election.

Notice is also hereby given, that a Special General Meeting of the Proprietors of this Company will be held immediately after the preceding Half-yearly General Meeting, to authorise an alteration being made in the Company's Deed of Settlement, by increasing the present amount of the reserved fund, such increase to be effected by an addition of 5 per cent. on the amount of each dividend that may then and subsequently be declared.

By order of the Court of Directors,

26, Austinfriars, Dec. 19, 1849. WILLIAM LECKIE, Secretary.

GUADALCANAL SILVER MINING ASSOCIATION.—PAYMENT OF CALLS.—The attention of the shareholders is particularly requested to the proceedings of the Adjourned General Meeting, held 15th December inst., at which the DATES of the remaining CALLS due on the NEW SHARES last issued were ALTERED, in consideration of a preference to the extent of 25 per cent. of the net profits to be given to the same, the sum of THIRTY SHILLINGS per share remaining due will now become PAYABLE, in two instalments of 15s. each, on the 1st of January and 1st of February, 1850, respectively, instead of January 1, March 1, and May 1, 1850. 37

By order, H. T. RYDE, Secretary.

34, Broad-street-buildings, London, Dec. 19, 1849.

KESWICK MINING COMPANY.—The directors of the KESWICK MINING COMPANY hereby give Notice, that, in consequence of a resolution unanimously passed, at the last General Meeting, all Share Certificates have been called in, and that NO LEGAL TRANSFER can be made, but by entry in the Cost-book.—8, Walbrook, Dec. 22, 1849. 38

KINZIGTHAL MINING ASSOCIATION.—NOTICE OF CALL.—Notice is hereby given, that the directors of the KINZIGTHAL MINING ASSOCIATION have this day made a CALL of FIVE SHILLINGS, or Three Florins, per share, and have appointed such call to be PAID on or before Monday, the 21st of January, 1850, to their bankers—viz.:

In LONDON—Messrs. Masterman, Peters, and Co.
In STUTTGARD—Messrs. Doertenbach and Co. 39

By the Statutes of the Association interest, at the rate of 5 per cent. per annum, will be charged upon all sums in arrear after the 21st of January, 1850.

By order of the board, GEO. COPELAND CAPPER, Sec.

1, Adelaide-place, London-bridge, Dec. 15, 1849.

ROYAL SANTIAGO MINING COMPANY.—The directors hereby give Notice, that the HALF-YEARLY GENERAL MEETING of the shareholders will be HELD at the office of the company on Wednesday, the 2d January next, at One o'clock precisely, when the directors will make their report: after which the MEETING will be made SPECIAL, for the election of a director, in the room of Sir Samuel Scott, Bart., deceased.—Any proprietor intending to offer himself to become a director, must leave notice of such his intention, and deposit his certificate of shares to make out his qualification, at the office of the company, at least 21 days before the day of meeting.—38, Broad-street-buildings, Nov. 24, 1849. 40

UNITED MEXICAN MINING ASSOCIATION.—Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of proprietors of this association will be HELD at the office of the company, No. 5, Finsbury-circus, on Wednesday, the 30th day of January next, at One o'clock precisely, when the directors will recommend the PAYMENT of a DIVIDEND, at the rate of SEVEN SHILLINGS and SIXPENCE per share, PAYABLE on and after the 1st day of February, 1850, between the hours of Eleven and Three. 41

Forms for claiming the dividend to be obtained at the company's office, and must be left two clear days for examination previous to payment. Also the election of a director, in lieu of James Nelson Shoolbred, Esq., the present manager of the association in Mexico, will take place. Candidate—Henry Bunster, Esq., Exchequer Bill Loan Office, South Sea House, one of the present auditors.

The transfer book will, as usual, be closed on the evening of the 12th, and re-opened on the 31st of January. By order of a court of directors,

No. 5, Finsbury-circus, London, Dec. 27, 1849. JOHN MATHER, Secretary.

IRON ORES OF NOVA SCOTIA.

Our readers, particularly those connected with the manufacture of iron, will recollect that, during the middle of last year, several advertisements and notices appeared in the *Mining Journal* relative to the formation of a company for working some extensive deposits of iron ore, situate in the township of Londonderry, in Nova Scotia. The party who was then under agreement for the tract of land upon which these mineral riches are situated has, we understand, allowed his right of possession to lapse, and they are, with the exception of the small part originally granted by the Crown to the party above mentioned, now in the hands of a gentleman who, we think, is progressing in the right direction, not only to realise large individual advantages, but even to effect a great public good. These ores are of a character most applicable to the manufacture of charcoal iron and steel, and being in the immediate neighbourhood of water carriage into the Bay of Fundy, the manufacture of every description of iron could be carried on in these localities at prices with which probably no other spot on the face of the globe can compete. We have, during the past week, had an opportunity of examining a variety of specimens of the different descriptions of mineral, and they are all of a highly-interesting character; while from analyses made by Dr. Jackson in the United States, Mr. Mushet in England, and other eminent mineralogists, it appears they are entirely free from sulphur, arsenic, and other impurities and alloys, which so materially deteriorate most iron ores of all countries. Some of them are highly magnetic, and there is one kind which, during its deposit, has been the grave of myriads of shelly animals, the elements of which have become so identified with the ore, that it actually carries with it its own flux, and that in a proportion so nice, that it could not be amended by the most careful mechanical mixture. We saw some steel tools which had been formed from iron run down from this ore without the addition of a particle of matter to act as a solvent, besides the fuel necessary to its reduction. The ore in heating decrepitates, exposing a large surface to the fire, and very quickly runs down, leaving the slag, or glass, produced by the carbonate of lime contained in it, floating on the surface. These ores, though differing in productiveness, varying from 36 to 76 per cent. of pure iron, are all exceedingly free from impurities of any description, and are found, under varying circumstances, deposited in beds similar to the iron-stone deposits of the coal measures—in true veins nearly perpendicular—and coming out to surface on the mountains, widening as they get deeper, with every facility for working.

The geological features of the country are silurian slates, and the cleavage and dip of the strata render it easy to obtain by pick and hammer, blasting only occasionally having to be resorted to. There are inexhaustible supplies of coal, which could be used for common pig-iron; and the interminable forests on the slopes and summits of the mountains, which from the character of the ground must ever remain forests, will for ages supply charcoal for the formation of charcoal iron and steel, for which a market could be found in all parts of the civilised world, at prices which, while realising large profits to the parties working the mineral, could be delivered at Liverpool for less per ton than the cost of the *fuel alone* for the manufacture of similar iron in England. There is also abundance of fire-clay of excellent quality, several extensive deposits of ochres of different shades of red and yellow, one of which has been dug 40 feet in depth without meeting with any deteriorating strata—in fact, Nature seems here to have deposited a combination of mineral wealth, which appears, from the opinions expressed by practical men, to be almost unexampled, and which must, with anything like management, prove highly advantageous to the proprietor, and those gentlemen who may associate with him in its development. We expect again shortly to revert at greater length to the subject, and, in the interim, a number of interesting specimens may be inspected at our office.

SEWAGE MANURE OF THE METROPOLIS.—At a period like the present, when an efficient drainage of the metropolis, and other large cities and towns, without deteriorating the waters of the neighbouring streams, is such a desideratum, it will be highly satisfactory to all parties, who take an interest in so important a subject, to know that one great principle in furtherance of such improved drainage is fully established—that the products of the sewers is practically valuable, and may be turned to highly remunerative account. From the last report of the directors of the Metropolitan Sewage Manure Company, we learn that, after a trial of this great commercial, agricultural, and national experiment, they are gratified in being enabled to announce its complete success. In four months since the completion of their machinery for its distribution, they have obtained 25 occupiers of market garden land as tenants for a constant supply, over 100 acres, at an annual rental of 400*l*. This, however, is only about 1-18th of what, by the company's arrangements, they are now enabled to supply, and when the remaining occupiers in the neighbourhood of Fulham shall avail themselves of the advantages offered, the rental will reach 5000*l*. per annum, which will pay a dividend of 10 per cent. on the capital invested. An extension of the works to supply 10,000 acres is in contemplation, which is estimated to require an outlay of 107,227*l*., but will return a dividend of 23 per cent., giving an average of 18 per cent. per annum on the entire operations of the company. From the testimonials which accompany the report, from a number of market gardeners and private gentlemen, who have had recourse to the sewage manure, it appears the results are most satisfactory, increasing the growth, and improving the quality of vegetables and fruit, particularly those of the cabbage kind, beans, kale, celery, strawberries, &c., and having a marked effect on grass land, when watered after mowing. It has also destroyed the fly in French beans and scarlet runners, and is expected, when tried, to have a like effect on the green aphis, that pest to the grower of roses. It being thus proved that the sewage is of positive value, the question of expense in the improvement of drainage becomes a secondary consideration, as there is now evidence that the return will, to a considerable extent, repay the outlay.

A NEW TELEGRAPH COMPANY.—A new telegraph company has been recently formed, under the firm of House, Brett, and Wilmer, who, it is said, are to introduce their form of telegraph into various countries; Mr. House, who is an American, to have the management of the business in the United States, Mr. Brett over the continent of Europe, and Mr. Wilmer in this country. We learn that a recent trial from London to Norwich proved to be eminently successful. This principle of telegraph possesses several claims to public favour. It requires only one wire; and it prints the communication legibly in capitals, on long narrow strips of paper, so that what is spelled at London by the sender is printed at Norwich, and the whole responsibility and risk of the receiving clerks, and the most prolific source of error in transmission, are wholly got rid of. Instead of working two needles by handles, the operator plays on keys like those of a pianoforte, each key, on being pressed down, printing a capital letter on the paper at the other terminus of the wire. This is not only more accurate in its operation, but it will save much time now lost in various ways between sender and receiver. In fact, the instrument is a tell-tale, and a self-acting printing machine, or copyist.—*Manchester Guardian.*

CORNISH STEAM-ENGINES.

[Abstract from Browne's *Cornish Engine Reporter*, from Nov. 21 to Dec. 20, 1849.]

PUMPING-ENGINES.

Number reported	29
Average load per square inch on the piston, in lbs.	13·0
Average number of strokes per minute	5·7
Gallons of water drawn per minute	6179
Average duty of 20 engines—being million lbs. lifted 1 foot high, by the consumption of 1 cwt. of coals	65·1
Actual horse-power employed per minute	1202·1
Average consumption of coals per horse-power per hour, in lbs.	3·9

ROTARY-ENGINES—WHIMS.

Number reported	20
Number of kibbles drawn	75,367
Average depth of drawing, in fathoms	134·3
Average number of horse-whim kibbles drawn the average depth, by consuming 1 cwt. of coals	51·7
Average duty of 13 engines, as above	17·8

STAMPS.

Number reported	7
Average number of strokes per minute	13·8
Average duty of 5 engines, as above	40·7
Actual horse-power employed per minute	142·9

PUMPING-ENGINES DOING HIGHEST DUTY.

Par Consols	80-inch single	*Millions* 97·6
Fowey Consols	80-inch single	95·4
Great Polgooth	80-inch single	86·8
Par Consols	72 and 36-inch Sims's combined	83·1
Trelawny	50-inch single	81·2
Stray Park	60-inch single	76·8
Callington	50-inch single	76·2
North Pool	60-inchsingle	71·0

WHIM-ENGINES.

Fowey Consols	22-inch double	*Millions* 31·9
Fowey Consols	22-inch double	28·5
Par Consols	34 & 15-inch Sims's combined	28·3
Par Consols	34-inch single	18·8
Great Polgooth	22-inch double	16·6
Great Polgooth	22-inch ditto	16·0

STAMPING-ENGINES.

Great Polgooth	35-inch double	*Millions* 57·5
South Caradon	26-inch single	48·9
Lewis Mines	51 and 29-inch Sim's combined	48·8

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The 60 fm. level, east of Field's engine-shaft, is quite as good as it was when last reported, and the pitwork is completed for sinking. As soon as Christmas-day is past, the whole of the men will commence sinking in the bottom of the mine—that is, the 60 fm. level east and west—also the sinking of the engine-shaft. The engine was idle all Saturday night, getting the new boiler to work, in consequence of which the water is not yet drained to the bottom of the mine, but will be about midday to-morrow. Our copper sampling this day is as follows—viz., 37 tons, principally from the 60 fm. level.

BARRISTOWN.—The end, driving on the new lode, is much the same as last reported—lode 20 in. wide in the bottom, and producing about 1 ton of lead per fm.; the back of this level, stoping on tribute, is producing about 8 cwts. of lead per fm. We have commenced to draw the water out of Slob shaft; and to prevent the cost from being too high, we have taken the men who were sinking in the bottom of the 24 fm. level (which can be resumed some future time); there will be a cross-cut communicated from Slob shaft to the new lode, 14 fms. under the 16 fm. level, in about six weeks from the time, which will be about 2 fms. under the present end now driving; this will leave 2 fms. high of ore ground to take away for the length of this level. The lode in the bottom of the adit level is rather improved in the past week, and there is some appearance of the ore going under the 16 fm. level in a pipe against the slide.

BEDFORD UNITED.—The ground in the engine-shaft is a little more favourable for sinking. In the 103 fm. level east we are driving by the side of the lode; in this level, west of Bailey's winze, the lode is 3 ft. wide, saving work; in this level east there has been no lode taken down. The lode in the 90 fm. level east is 18 in. wide, producing some saving work; in the winze in this level the lode is 3 ft. wide, producing 7 tons of ore per fm. In the 70 fm. level we continue to drive by the side of the lode.

CARTHEW CONSOLS.—At the upper mine, in my last report, I intimated it was my intention after Tuesday, the 18th of Dec., to put six men immediately to drive the 65 fm. level end south, but finding it necessary, and indispensible, to cut a plat in this level ere we went further, I have since that time engaged the men in so doing, which piece of work is now quite completed, and on Monday we shall commence first operations in either end in this level—*i. e.*, clearing the one north, and driving the other south in new ground. The lode in the 48 fm. level end south is getting more settled, and looks more promising, and in the 28 fm. level we are breaking good work in lead, but not in great quantities—the appearances in this end are very good indeed. In tribute I can report of nothing very different from last week. At the lower mine, the lode in the adit end is very much improved in its appearance this week, and looks far better than for a considerable time past.

CWM ERFIN.—There is no alteration in either one of our bargains since my last report. We have not made a communication to Robarts's as yet. The frost is rather against us at present for our dressing, but still we are getting on with most of our dressing, except the slimes.

DEVON AND COURTENAY.—We have driven north of the 40 fm. level, and intersected the north part that diverged from the lode some 3 or 4 fms. behind the end; the branch is small, and appears to be inclining in a westerly direction; the distance from the south to the north part of the lode is about 6 ft. In the end driving east, on the gossan lode, in the 50 fm. level, the lode is 2½ ft. wide, composed of spar, with killas and good stones of ore in the north part of the lode. The ground in the engine-shaft, under the 50 fm. level, is without any alteration since my last report. The pitches are producing some good work.

DYFNGWM.—The agent (Dec. 19) states that since last report he has no reason to alter his opinion as to the promising general prospects of the mine. The engine-shaft is down 7 fms. 3 ft. 6 in. below the 22 fm. level, and by end of January, 1850, expected to be complete to the 32 fm. level, and pitwork fixed. The adit level east is in good working order, and will not require any further outlay for many years; the lode at present produces but little ore, but in the sink from the bottom of this to the 22 fm. level, it is said that the lode is large and orey throughout. The adit level west is cleared, timbered and secured, to sink on steel ore. There is some good orey ground in the bottom of this level. A productive stope is set to two men. In the 16 fm. level the sink on the steel ore is cleared up, and the lode found to be productive, the ore of excellent quality. It will be advisable to let these stopes remain idle until the rise from the 22 fm. level is holed, which is distant about 7 fms. The lode in Davies' stopes, in the 22 fm. level east, is large, producing 1 ton of ore per fm.; the stope in the bottom of this level is in good orey ground, which will leave remunerative returns, but these stopes generally cannot be worked advantageously until the engine-shaft is down to a 32 fm. level. Tudor's stopes, in the bottom of the 22 fm. level, west of shaft, are producing 2 tons of ore per fm. The sheet of ore is dipping east, and I expect that the lode will be found very productive in the 32 fm. level, opposite the engine-shaft. Three small branches had been cut with lead throughout, one 1½ inch wide, and the others 2 and 3 inches wide. Jones's stopes, for 12 fms. in length, are producing 1 ton of ore per fathom, with every indication of improving. The men employed in stoping are raising some excellent ore, better I never saw in any part of the mine when I visited it last. In Young's cross-cut the lode has been intersected, and driven in a disordered state, and but little ore. In the dressing department, the stamps are being erected, and, with fair weather, will be complete in a month. The ore at present broken, and expected to be raised in six months, from 1st Feb. next, is estimated at 120 tons.

EAST CROWNDALE.—At Rix Hill, the lode in the 28 fm. level east has been driven on about 9 fms. 6 in., which has laid open good tribute ground. The 28 fm. level west has been driven about 8 fms. 6 in. through good ore ground; the present end is now poor, but a very kindly lode, composed of mundic, prian, peach, and copper, and ground favourable for driving. We shall set two new pitches in the back of the 28 next setting-day, the tribute will not exceed 8*s.* in 1*l.* Our tribute in the back of the 17 fm. level looks well, and will set at a lower tribute next setting-day, with the present prospects. I recommend driving another level before sinking either shaft, by that time we shall be able to judge whether the engine or the middle shaft should be first sunk. We calculate on sampling 8 tons of tin for November and December on the 8th January, if we are not prevented by frost in dressing, the proceeds of which I calculate will be full 360*l.*, which will more than cover our cost for the two months, and I am happy to inform you that our future returns will increase.

EAST POOL.—The 120 fathom level is driven west of engine-shaft about 15 fms.; the lode is 18 in. wide, at present poor, nor do we expect ore in this level until we have driven 10 fms. farther west. The 110 fm. level is driven 12 fms. west of cross-course, through tribute ground; the present end looks very promising, worth about 9*l.* per fathom. The 100 fm. level is driven west of cross-course through 20 fms. of tribute ground; the present end is poor, but we expect to find more lode to the south, as it is split some fathoms behind the end. The 90 fm. level is driven west of cross-course about 35 fms. through tribute ground; the lode, for the last 10 fms., has been worth 10*l.* per fm.—the men are now rising in the back at 7*s.* 6*d.* in 1*l.*; the winze sinking in the bottom of this level, 7 fms. west of the 100 end, is worth 6*l.* per fm; at present there is water in this winze, and the men are stoping the west end of it, which is worth 9*l.* per fm. In the 90 fm. level, driving west of cross-course, on the north lode, the lode is small and poor. In the 43 fm. level, driving east from East Wheal Crofty, on Reeves's lode, we have driven through 3 or 4 fms. of tribute ground, but the present end is poor. We have to drive this level 4 fms. to get under our 36 end, with which we hope to communicate in the course of the next two months. In the 100 cross-cut, driving south to cut the north Tincroft lode, we have driven about 65 fms.—the ground is harder than it has been. We have discovered some branches containing spots of copper ore, and expect to cut the lode very shortly. In the 16 fm. level, on the south lode, we are working with six men at 3*s.* in 1*l.*; the lode in the east end is worth 30*l.* per fm., and the appearance in the west is good. [The above report was read at the meeting, held at the mine on the 18th inst., the particulars of which appeared in our last Journal.]

ESGAIR LLEE.—The north lode in the deep adit, east of the cross-cut, is much the same—stones of lead, but not sufficient to set a value on. The lode in Morgan's winze below the 12 fm. level is from 4 to 5 ft. wide, composed principally of compact slate, and producing some stones of lead: the caunter lode in the 12 fm. level, east from surface, is looking promising, and producing some very good gossan; we have holed the shallow adit west of Morgan's winze, on the caunter lode, to the one east from surface, and we are now driving north from the shallow adit 10 fms. west of Morgan's winze, to prove the size of the caunter lode; we have not yet cut the caunter lode in the deep adit east from the base of the hill. The second party have left the engine-shaft, and a third one taken it till next survey day at the former price (1*l.* per fathom).

HEIGNSTON DOWN CONSOLS.—The lode in the 20 fm. level, west of Hitchens's shaft, maintains its size and character. The lode in the 35 fm. level, east of cross-cut, is improved in the past week; there is at present a leader of copper ore, 9 in. wide, of superior quality, with indications of greater improvement; the winze sinking below this level is without important alteration. The branch alluded to in the 45 fathom cross-cut is improved since my last, both in size and quality.

HOLMBUSH.—The 120 fm. level south, on lead lode, has not been wrought on since last reported; the water is abated, and we hope to resume operations there shortly. The ground in the 120 fm level south, towards the flapjack lode, is improved. The lode in the 110 fm. level south is 4 ft. wide, composed of quartz, prian, and stones of lead. The flapjack lode in the 100 fm. level, east of the great cross-course, is 2½ ft. wide, and will produce about 3 tons of copper ore per fm. The pitch in the back of the 120 fm. level, on the lead lode, is still very productive.

KIRKCUDBRIGHTSHIRE.—At Stewart's shaft the lode is 5 ft. wide, a fine spar, with spots of ore through it. The lode in the 62 west is 3 ft. wide, yielding 6 cwts. of lead per fm.; the winze over this end is making about the same quantity of ore; we have holed the rise in the 62 east to the winze. The lode in the 50 west became very slight for ore in the beginning of the week, but it has improved again, having fine stones of ore through it now, and the lode opening.

KITT HILL MINE.—After the general meeting held in March last, an adit level was commenced driving south from the Clitter to intersect the different lodes on which the old tinners have made considerable workings on the backs. This level is termed the middle adit, and will obtain a depth of 45 fms. from the top of the hill. After this level had been driven a distance of 12 fms. from its mouth, a large tin lode was cut, about 5 ft. big, underlying a little south. From samples taken of this lode, I estimate its worth to be about 20*l.* per fm.; and as it was cut only 4 fms. under the surface, there is every reason to suppose the lode will increase in value in depth; and as the backs rise, by driving west on its course to a depth of 35 fms., I should recommend its being immediately driven on, as I can confidently state that, should it continue only as good as cut, I can make returns from it immediately of 80*l.* per month, and steadily increase them to 250*l.* in six months, at an outlay of from 35*l.* to 120*l.* per month. This middle adit is driven altogether 38 fms., and a railroad has been laid for bringing out the stuff. In driving, we have recently intersected a cross-course, which will materially reduce the expense of continuing this adit, and in about 6 fms. driving I expect to cut another lode. The deep adit north, driven before I was appointed agent 40 fms., with the intention of cutting the Holmbush lodes, has been continued driving; it is 45 fms. deeper than the middle adit. This level is now 58 fms. 4 ft. in length, and is nearly under the perpendicular of the first lode, presumed to be the Holmbush copper lode. This lode I expect to cut soon, and is fully 30 fms. deep. After this lode is cut, the next lode met with will be the flapjack lode; these lodes form a junction in the East Kitt Hill sett. The old tinners have worked very extensively on the backs of these lodes, and from the rich specimens of tin found at the surface from time to time, I expect these lodes to cut very rich. One solid rock of tin, found a few weeks since, weighed 160 lbs., and, after having been broken, now weighs 138 lbs., and is nearly solid tin. A pitch has been set in the shallow adit at 13*s.* 4*d.* in 1*l.*, and the tributers are getting good wages. Tributers are also returning tin at 10*s.* in 1*l.* from other parts of the sett at surface. As this hill contains some of the most productive lodes in the neighbourhood, I have no hesitation in saying that, were steam stamping power erected, very large returns could now be made monthly. I should recommend that a steam-engine be immediately erected in the Clitter for stamping, and of sufficient power to be available for sinking, and I should also recommend that a shaft be commenced between this sett and East Kitt Hill sett at the joint expense of the two companies, if the adventurers in that sett are disposed to join in such an undertaking. This would enable you to make returns from the lodes adjoining East Kitt Hill sett, and try them in depth at a moderate expense; while the adits now driving are quite sufficient to produce returns for many years to come from the lodes westward. Another water-wheel should also be erected to work another set of stamps; this would enable you to make considerable returns for many months in the year; but in the summer season, from the falling back of the springs, it could not be depended on for doing much work. The work done since my last report has been, driving the middle adit nearly 38 fms. south, and railway lain; the deep adit has been continued on nearly 20 fms. south, and railway nearly complete. The shallow adit has been cleared out and secured to the engine-shaft, and a lobby has been driven and two promising tinny lodes cut north about 8 fms. below the middle adit. The smiths'-shop and a material-house have been built, and an office and residence for the agent on the mine have been completed and fitted up. I have also set for driving an intermediate adit between the deep and middle adit below the lobby in which the two promising lodes were seen, and which will be cut 40 fms. deep, and I expect shortly to cut in this adit a larger and more promising lode about 8 fathoms deep. There is also another adit to the west nearly up to these lodes, from which and our new adit east, if they cut as I expect, very large returns of tin must be almost immediately made. We have constantly abundant water for dressing, and now only want adequate stamping power, not only to pay cost, but to enable you to declare dividends.

SOUTH WHEAL TRELAWNY.—The engine-shaft is suspended. We have commenced driving the cross-cut both east and west of the engine-shaft; the ground is favourable; also the strata, composed of a deep blue killas. Things are in good working order.

SOUTH WALES MINES.—The south lode in the deep adit, east of the Rhydnet river, is much the same as last reported, being 9 or 10 ft. wide, composed principally of mundic, quartz, white clay, and a little lead. The lode in the winze, under the deep adit, is looking promising, producing some copper and a little lead. The lode in the shallow adit east, 10 fms. above the deep adit, is 10 ft. wide, composed of a good gossan, mundic, copper, quartz, and clay, and looking promising.

TRELEIGH CONSOLS.—In the 125 cross-cut, at Garden's shaft, driving towards the lode, ground wet. In the 100, west of Garden's, lode 2 ft. wide, with stones of ore. In the 90, west of ditto, lode 18 in. wide, with good stones of ore. In the 80, west of cross-cut, on the north part, lode 3 ft. wide, worth 20*l.* per fm.; in the 80, west of ditto, on the south part, lode 2 ft. wide, with stones of ore, and looking kindly. In the 70, west of Garden's, lode 3½ ft. wide, with stones of ore. At Wheal Parent, in the 40, east of engine-shaft, lode 2½ ft. wide, with stones of ore, and looking more kindly. In the 40, west of ditto, lode 2 ft. wide, with stones of ore. In the 30, east of ditto, lode 20 in. wide, with good stones of ore. In the winze below the 30, lode 3 ft. wide, worth 16*l.* per fm. In the 30, west of engine-shaft, lode 2 ft. wide, poor. On the middle lode, the adit, east of Nicholson's shaft, lode 15 in. wide, with good stones of ore, looking kindly.

WEST WHEAL JEWEL.—In the 85 fm. level, west of Williams's cross-course, on Wheal Jewel lode, lode not taken down in the past week. In the 70 fm. level, west of ditto, on the same lode, lode when last taken down worth 20*l.* per fm. In the 47 fm. level, east of ditto, on the same lode, lode when last taken down worth 5*l.* per fm. No lode taken down in either of the levels on Telcarne tin lode in the past week. In the stopes in the back of the 12 fm. level, west of Pryor's winze, on Telcarne tin lode, lode worth 11*l.* per fm. In the stopes east of this winze, on the back of the same lode, lode worth 12*l.* per fm. In the stopes in the bottom of the 12 fm. level, east of Tregoning's shaft, on the same lode, lode worth 25*l.* per fm. In the stopes in the bottom of the 12 fm. level, west of Tregoning's winze, on the same lode, lode worth 23*l.* per fm. These stopes are working on tribute.

WHEAL TRELAWNY.—In the 82 end, north of Phillips's shaft, the lode is 3 ft. wide, worth 7*l.* per fm; in the 82, south of ditto, the lode is 3½ ft. wide, worth 7*l.* per fm. In the 72, north of ditto, the lode is 2½ ft. wide, worth 8*l.* per fm.; in the 72, south of ditto, the lode is 3 ft. wide, worth 6*l.* per fm. In the 62, north of ditto, the lode is 3½ ft. wide, worth 11*l.* per fm. Trelawny's shaft is cased and divided down to the 82, and the men are now engaged doing the necessary work to commence sinking, such as putting in the penthouse, &c., and which will not take many days. The cross-cut towards the lode in the 82 is driven 5½ fms., and we expect we have somewhere about 3 fms. more to drive to the lode. In the 72, north of this shaft, the lode is 3 ft. wide, worth 9*l.* per fm.; in the 72, south of ditto, the lode is 2½ ft. wide, worth 8*l.* per fm. In the 52, north of ditto, the lode is 2½ ft. wide, worth 14*l.* per fm. At the north mine, in the 58 end, north of Trehane, the lode is impregnated with lead, but not yet of much value. In the 40 end, north of Smith's shaft, the ground is getting firmer than it has been, and we expect that the lode will make a change, particularly as there is a good lode gone down before this end in the bottom of the 30. Nothing new to notice in the stopes. We sampled on Saturday last 102 tons, computed, of rich silver-lead ore. The water has prevented our obtaining ore, as heretofore, from the north ground.

WHEAL MARY ANN.—Pollard's shaft is sunk 8 fms. 2 ft. under the 50 fm. level. The lode in the 50 fm. level, north of the shaft, is 3 ft. wide, and worth 12*l.* per fm.; the lode in the same level south is 1½ ft. wide, and worth 5*l.* per fm. The lode in the 40 fm. level, south of the shaft, is 2 ft. wide, and worth 5*l.* per fm. The lode in the 30 fm. level, south of the shaft, is similar to my last report. The lode in the 15 fm. level, south of the shaft, is 1½ ft. wide, and of a promising character, but at present unproductive of lead. The lode in the 60 fm. level, south of Barratt's shaft, is 3 ft. wide, and worth 12*l.* per fm. The lode in the 50 fm. level, south of this shaft, is 2 ft. wide, and worth 7*l.* per fm. The stopes throughout the mine are producing a fair quantity of lead. On Friday last we sold two parcels of lead ore—No. 1.: 78 tons, to Messrs. Pontifex and Wood, at 17*l.* 4*s.* 6*d.* per ton; and No. 2, 68 tons, to Messrs. Robert Michell and Son, and the Penpoll Smelting Company, at 7*l.* 1*s.* per ton.

WHEAL PENHALE.—In going through the mine to day I find no important change since my last, neither in tutwork nor tribute. This week's development of the lode in the middle shaft convinces me more strongly of its importance.

WHEAL VINCENT.—In driving the cross-cut from the eastern shaft we have just touched the caples of the lode, and let down such an immense quantity of water, that we are obliged to abandon it for a day or two, until the lodes are somewhat drained; however, from the indications visible, there is every probability of its being a productive lode. The other parts of the mine are looking well, but little has been done, it being Christmas week. I hope to report more fully in my next.

FOREIGN MINES.

IMPERIAL BRAZILIAN MINES.—*Banasal, Oct.* 19.—At Gongo, all the old workings in the mines must be abandoned, but the mode now adopted for the future working will discover and lay open to the surface nearly all the former workings above the 14 fm. level. At Banasal you are aware that nothing has been done in the points where remunerative produce is most expected—viz.: the bottom of the mine, more particularly Thomas's vein, which has been for some time past under water; this vein, I am told, yielded gold when last worked on, but pronounced to be poor; notwithstanding this, I have indeed very great hopes, that by a vigorous prosecution of the mine, not only in this spot, but many others, satisfactory results will follow—recent circumstances give strong grounds for such an opinion. Since January, of this year, 160 lbs. have been risen, and at some periods as much as 13 and 13 lbs. per day, all of which was found in a very small compass, as the excavations since that period have been very limited. This has considerably strengthened the hope I now entertain of successful results accruing from our future exertions; should a doubt exist with you as to the certainty of overcoming all difficulties, and of giving this mine an effectual prosecution, I wish, if possible, to remove it, for I am quite confident of carrying my point in this respect. The present machinery and pitwork are certainly most badly arranged and ill-combined. The pump-work that has been lately drawn to the surface from Gibson's shaft is quite out of proportion in the parts, consequently very defective; all this I have to put in good working order, which will, as I told you in England, cost time—nevertheless it can be done, and the mine effectually prosecuted. As soon as I have arranged matters so as to be working in the bottom of the mine (and I hope raising gold to pay the expenses), Santa Rita shall have my attention; the commencement of operations there will be the erection of a small stamping engine for trial purposes, and if satisfactory results follow, several of similar description may be employed, as the fall of water is great, and the formation almost inexhaustible. As to Gongo, no doubt exists with me as to the results of the new mode of prosecuting this property; when the open cutting reaches the old mine formation, and a large stamping power can be supplied from it, it is quite evident that great and satisfactory results will follow; this is not my opinion only, but I may say of every one here, both English and Brazilians, who are acquainted with the mine. The neighbourhood appear very glad to see active operations commenced again in Gongo, and seem confident that the company is again about to flourish. I have conversed with many of the leading and intelligent men on mining affairs in this district, whose words and opinions may be relied on, and they all agree that we shall be amply remunerated for our labour. I very well recollect when I was employed by the Cocoes Company (I think in 1835) of a great discovery being made at Gongo, in a piece of ground left standing as worthless in a very shallow part of the mine; it became necessary to retimber some of the old workings near this place for the better security of the deeper parts, and in doing which some gold was discovered and followed, and in a very inconsiderable space of time it was reported that upwards of 10,000*l.* sterling worth was taken out; accidental discoveries, similar to this, have since been made. It is, therefore, very probable that many more of these small bunches, having escaped the scrutiny of those who conducted the last workings, now exist, and which are sure to be discovered by the mode of prosecution now pursuing; you will, therefore, perceive that the favourable opinion I formed and expressed to you of the mines when I was in England, has not in the least deteriorated in my examination of them here. I regret I cannot make a greater dispatch in our preparatory workings, but I beg to assure you that every exertion and means, compatible with prudence and economy, are now using to this effect. The iron wheel from Rio, and the necessary supply of iron and stores have swollen the disbursements very considerably; however, this is not continuous, and after the new wheel is got to work, I hope the expenses will considerably diminish, and the produce of gold increase.

Bananal.—During the last 10 days we have had a few boxes of coarse work for the washing house, principally risen from the back of the 6 fathom level, on the big pump vein. Magelhaes winze has been communicated with the 14 fm. level; we intend extending this level longitudinally on the line, for the chance of discovering other shoots of gold; the other places in the mine, in course of prosecution, present nothing new, as will be seen by a reference to the captain's report. As I anticipated in my last, we have commenced sinking Gibson's shaft, below the 14 fm. level; the big pump vein is now in the bottom of the shaft, and to-day a tolerably promising sample has been taken from it; we may, therefore, expect some gold from this, as well as the Magelhaes vein, as we are now in a position to follow them in depth, and I hope, in about three months from this date, to make Gibson's shaft the deepest point in the mine, and, consequently, a drain for all the other parts; we shall then have Thomas's vein dry, which will very much facilitate the extraction of it. From the immense size of our pumps, our engine-shafts are not of sufficient capacity for pitwork and hauling purposes; it, therefore, became necessary to sink a new whim-shaft. It has been commenced, and I have taken the liberty to call it Gibbes's, out of respect to our director, Thomas Gibbes, Esq.; the sinking of it will not be expensive; the water has been drained from the ground; the shaft, consequently, will be sunk dry, and, I hope, expeditiously, by adopting the mode of working recommended in the captain's report; and when completed to the 14 fm. level, it will entirely supersede the present tedious and expensive way of drawing the stuff through Thomas's diagonal shaft.

Gongo Soco.—At this place we are getting on with the different works as fast as our limited force will allow. The open cutting has reached Goldsmid's stamps, and ere I write you again we must commence taking it to pieces, but shall re-erect it further down the stream. We have several free labourers employed in the open cutting, and in making researches in the western part of the mine. The great western stamps has been set to work with ten heads, she has given us about three-quarters of an ounce of gold in about 60 hours; the stuff supplied to her was miscellaneous, and was scarcely expected to yield anything, being merely put in as an experiment. You will be glad to observe, by the medical report a continuation of the healthy state of our establishment, and I have great pleasure in adding that they are orderly and quiet.

Gold Report.

Gongo—From 3d to 12th October	*Ozs.*	3	0	0	0
Banasal—From 3d to 12th October		1	3	16	0—*Ozs.* 4 3 16 0

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares Dec. 15.—Since my last we have been occupied in the continuation of the work therein alluded to, and have cleared the 30 fm. level to San Gaspar winze, which we expect to be able to make available for sinking, or, rather, draining the water to the next

evel, at the same time prosecuting the shaft under the Calavera winze, so as to have a drawing shaft available, and without which our draining the water will be useless. We have examined more of the 30 fm. level eastward, and find some very fine arches of lead exactings, we think, better than has been stated in our reports of other parts of the mine. This part of the level, as well as the south lode, west of the engine-shaft, will not be available for tributers till we have made good the communication, by clearing the stuff lying in the level, which we shall do as quickly as the whim can draw it. We have now to report to you that we have commenced in our tribute department, by setting the back of the 30 fm. level on the north lode, between the two cross-cuts, shown in the plan, a distance of about 30 fms. to two pairs of men, at 3 reals per arrobe, clean lead, the takers paying all costs. This should give them good wages, and is equal to about 2*l.* 10s. per ton. We have many better spots in sight, but this is at present the most accessible; the number of tributers will rapidly increase, as fast, I expect, as we shall be properly ready for them with the floors. I have made three assays of the 8 tons of ore found in clearing the Calavera winze, and the result in every instance gives 80 per cent. for lead. There are two main lodes, as I have before mentioned, in this mine, and both have very extensive workings on them; they cross each other about 30 fms. west of the engine-shaft, and are, fortunately, so close together that the same shafts will be available for both. There are also two minor lodes, or branches. The engine keeps the water at 6½ strokes per minute, and we hardly expect a reduction on this.

NATIONAL BRAZILIAN MINES.—*Cocaes, Oct.* 12.—Since the 2d inst. the ground has become more favourable for getting through at Hamilton's stope, and at the lower part of the excavation there is now a layer of soft jacotinga, from which samples have been taken during the week, promising favourably, and which, we hope, will lead to the discovery of some vein.

Produce—Cocaes,	25th Sept. to 3d Oct.	*Mrs.*	8	7	4	40		
,, ,,	4th Oct. to 13th Oct.		12	3	6	3—21	3	2 43
,, Cuiaba,	26th Sept. to 6th Oct.		1	7	1	13		
,, ,,	6th Oct. to 16th Oct.		2	0	1	20—	3	7 2 33
	Total	*Mrs.*	25	2	5	4		

ST. JOHN DEL REY MINES.—*Morro Velho, Oct.* 8.—It is quite consoling to witness how rapidly our population has been returning to a more healthy state. In May and June the daily sick list ran from 90 to near 100, averaging about 80 to 85; it has fallen during the past week to 33 and 48, averaging 40; but during the last two months it has nearly disappeared, for while the cases of pneumonia and pleuromonia were 16 in June, and 24 in July, they fell off in August to four, and in September to only two—this is itself a sufficient answer to the pseudo-humanity of those persons who presume to say that the operating cause of the great sickness and mortality, which undoubtedly reigned amongst our blacks up to June last, arose from their being overworked. Since that time, though the labour imposed on them continues exactly the same as before, the amount of sickness, and consequent mortality, is fast subsiding to reasonable limits, not being now more than one-half it had been; while pneumonia, the most fatal of all our disorders, has almost wholly disappeared for the present. I have the satisfaction to inform you, that our working force has been latterly increased by the influx of Brazilian borers (which, as I have already informed you, I am doing all I can to encourage), as likewise by the restoration to health and strength of so many of our blacks, who are once more doing good service in the mines—so that the number of borers, which in June and July averaged only 216 and 217, has in the first few days of October averaged 242.

Produce for September.—23,629½ oits.—997 lbs. troy—viz.: 23,603 oits., from 5296 tons (according to the returns from the reduction department)—4·45 oits. per ton; 26½ oits. tribute from Feixos—total, 23,629½ oits. This is the largest produce we have ever yet obtained, and I doubt not will be satisfactory to the board.

The stamps for working during the month average 94·33 heads. Had it not been for our prudent arrangements, and for the hearty manner in which our mechanics bestirred themselves when the millier of the Powles stamps gave way, the stoppage, and consequent loss of produce, would, of course, have been heavier.

The supply of stone during the month has been ample for our consumption, not only without deriving assistance from the refuse heap, but even enabling us to reject a little of the inferior ore, though only to the extent of about 90 tons.

Cost for September.—Rs. 41,167 653 at 25½	£4331	3 7
Produce 23,629½ oits.		
Less duty 5 per cent. 1,181½ ,,		
Nett oits. 22,448 at 7s. 7½d.	8569	19 10
Profit	£4238	16 3

In comparing this profit with that of previous months, you will perceive that it is apparently increased by omitting here to deduct 2 per cent. export duty, which, you are aware, is now paid in money instead of in kind, and which will, consequently, appear under the head of "Charges from Rio," as an increase to the cost, and a deduction from the profit of some future month; but, supposing that the statement had to be made in the old way, it would run thus:—

Cost for September (as above)	£4331	3 7
Produce 23,629½ oits.		
Less duty, 7 per cent. 1,654½ ,,		
Nett oits. 21,975 at 7s. 7½d.	8389	9 1
Profit	£4088	5 6

Now the highest profit, as well as the highest produce, previously attained had been in November, 1848, when the results were, produce, 23,407 oits., and profit, 4002*l.* 13s. 6d.—whereas, we have now 23,629½ oits., and profit 4088*l.* 5s. 6d., or without deducting, as we now must do, only 5 per cent. duty, 4238*l.* 16s. 3d. I had hoped, indeed, that there would have appeared a further reduction in the cost, and a consequent further addition to the profit of September, and this would have been the case, had it not been for the unfortunate failure of the millier at the Powles stamps, which forced on us an extra expenditure (including the value of a new cog wheel) of about Rs. 1500, still I feel persuaded the results will be highly pleasing to the board. The mines were never in more perfect working order, yet they will be still more so in about twelve months, when the opening out of the branch lode in the north side of the gut will enable us, even without any increase of our present boring force, to break larger quantities of ore in the Bahu Mine, and when the expected completion of the two inclined planes will enable us to haul up such increased quantities of stone, which our present hauling power could not possibly effect.

Oct. 18.—Gold extracted to date, 7784 oits., from 411·86 cubic feet of sand (result of ten days' stamping)=18 9-10ths oits. per cubic foot. The stamps working 17 days averaged 94 7-10ths heads.

Supply of Stone.—I have much satisfaction in repeating that the supply of stone is kept up with great spirit; so much so, that not only have we no further assistance from the refuse heap, but since the 24th of last month we have every day been enabled to reject a few loads of the inferior stone.

UNITED MEXICAN MINES.—*Guanaxuato, November* 9.

MINE OF RAYAS.—The court will learn by the report of Mr. Parkman, herewith transmitted in detail, that the improvement in the end and new pit of Santo Toribio, and in those of San Cresencio, specially alluded to in my last letter, continues without any variation, further than a fair prospect of further extension in all of four points, inasmuch as the breadth of vein is increasing, whilst its quality continues the same. The other productive workings have not shown any new feature; the general yield of picked ores, however, has given an increase of 200 cargas in the five weeks, ended the 3d inst., as compared with the like term, ending the 20th September. On the other hand, the sales by the mine and by buscones have fallen off together to some extent, but will be more than compensated by the increased quantity and quality of the picked ores under process of reduction.

MINE OF ALDANA.—The occasional interruption by water, &c., in the shaft having been completely removed, the sinking therein has been more regular, and reached 12½ varas in five weeks, making the entire depth of 86½ varas on the 3d inst., leaving, therefore, about 53 varas to cut the vein in that locality.

MINE OF PROMONTORIO.—No essential change is observable in the workings, though their produce has been less, both in quality and quantity, than in the preceding month, which is, however, only attributable to the common mutations of the vein.

Remittances.—By the usual conducta at the end of the year I purpose to transmit a further sum to the agents at Tampico for shipment to the directors, but cannot at present name the probable amount.—J. N. SHOOLBRED.

NOTE.—A remittance of $30,000 and 1000 doubloons has been received by this packet, —J. MATHER, Secretary.

The following is the Report on the State of the Workings in the Mines of Rayas, Aldana, Promontorio, and Jesus Maria y Jose:—

MINE OF RAYAS.—Regarding the works of buscones, we have only to repeat what was said last month, that they present no change worthy of remark.

Crucero of Santo Toribio.—This work has advanced but 200 varas in very hard and poor vein: it has been persisted in, with a view to the immense advantage that would accrue from the discovery of a body of ore in this portion of the mine.

Frente of Santo Toribio.—During the month this work has advanced 5·46 varas. The improvement mentioned last month continues, and appears to extend to a "pozo" opened near the end.

Workings in Ore.—Regarding the Contra Cielo there is no material change to be remarked. The ore continues good, and the extraction most arduous from the want of ventilation. The only available remedy for this evil is a communication with the workings of the Promontorio. As this would be advantageous to both mines, a work has been commenced in the last week with that object, and being likewise a speculation on the intermediate space. In the pozo of Santo Toribio we have commenced taking out the water, and shall, we hope, be enabled to resume work there within two or three weeks. San Crecencio frente and pozo, on the north-west side of Santo Toribio, and near the bottom of the same, continues a very promising labor. These works have employed the nominal number of 54 barmen, which has, however, rarely been made up at night. The ore remitted to the haciendas in five weeks amounts to 3600 cargas.

MINE OF ALDANA.—In the shaft of this mine the change of workmen mentioned last month was made. In five weeks they have sunk 12·75 varas, making a total depth of 86½ varas. In the pozo of Santo Toribio, in the meantime, 10·68 varas have been driven, without any change worth mention.

MINE OF PROMONTORIO.—The level of Santa Catalina has advanced 5·45 varas in hard and poor vein. A change has been made in the direction, in the hopes of getting into better ground: one of the pozos in this level has latterly improved. The pozo of San Feliciano is being driven, with the view of effecting a communication with the workings of Rayas, for mutual ventilation. The work is at present giving fair ore, and, I think, may be expected to improve.

MINE OF JESUS MARIA.—In this mine the necessary exterior works are advancing to a conclusion. The malacate and roof for same will be concluded in two weeks. We may then be enabled to go on sinking the shaft, and limit the expense entirely to that object.

S. P. PARKMAN.

MILWR LEAD MINES.—We have received the following return of the produce of these mines for the quarter ending December 31:—

	Tons.	Price.	Amount.
October (tickotting)	60	£11 9 0	£687 0 0
,, (private)	25	11 9 0	286 5 0
November (ticketing)	50	11 17 6	593 15 0
December ,,	50	12 6 0	615 0 0
Tons	185		£2182 0 0

DEVON AND COURTENAY.—The following is a statement of the quantity of ores sold, and prices realised, since the 5th October last:—

1849—Oct. 5	*Tons* 15	2 2 0	£	85	18 4
Nov. 10	18	1 3 0		165	9 3
Dec. 8	21	19 1 0		160	0 0
Total	*Tons* 55	3 2 0	£	411	7 7

h sum is more than sufficient to pay the cost of working the mine for three months; a few days it is expected there will be 20 tons more to sample.

A FEW HINTS TO MINING SHAREDEALERS.

SIR,—It is a pleasing sight to look over your Journal, and observe you holding out to the mining community that the price of most metals are either advanced or likely to do so. It is also cheering to all parties when the miner reaps a good harvest—the merchant, the artisan, and the agriculturist, all come in for a share with him; and when it shows an improving aspect, many are led to join in mining speculations, which, however, end like most other matters—some meeting with prizes and others blanks. But it should be borne in mind, that mining speculations are not so liable to be ruinous to an individual as many other speculations, from their rarely being carried out single handed. Most mines are worked in shares, and these shares so divided as to allow one person to take such number as he can carry on, without seriously injuring himself if it should turn out an unproductive concern. It is those who take a large number of shares in one mine, and that mine turning out a bad one, who injure themselves; if they were to take as many shares in mines as they could carry on without injuring themselves, and these shares divided over from 4 to 10 mines, they would then have a far better chance, and also see the system of management adopted in each mine, which would enable them to detect those that were running wild, and leaving but little chance for remunerating returns. Were these mines held in check, it is my firm belief that many which now turn out ruinous speculations would have been dividend-paying mines, and the features of mining speculation so altered as to assume a cheering countenance, that would tempt most speculating men.

I very much approve of your plan of inserting reports in your Journal as to the prospects and expenditures of all those mines that forward you their returns; and it is a matter of serious regret that the plan is not generally adopted, as I see many that are dividend-paying mines hang back from publishing general monthly reports, but are not backward in finding a way to get any improvement in a shaft, level, or winze, that will cause an advance in the price of shares, to find its way into your columns. Many of these mineowners look more to share jobbing than the real dividend, and dare not give a monthly report, as they are aware that this would be letting them open to the scrutinising eye of all the labouring miners in the mine, whom many of them they know are as keen as themselves.

I think but few practical miners, let their circumstances be ever so affluent, are known to purchase shares in what are termed rich mines, with a view of keeping them—there being but few of these mines, let their riches be what they may, which ever pay the principal and interest for high purchases. Speculating men in mines should purchase in shallow promising mines, at low rates; and let those that have good mines keep them and work them, which they are sure to do if they were not aware of the price being above the real prospects.

I noticed in your Journal of the 15th inst. a favourable report of Wheal Golden Mine. I was not aware of its being again set to work, and it was pleasing to find some of the men of old still living, and willing to give a brief outline of what those men did. In the beginning of June, 1829, I was requested by the then proprietors of the Wheal Golden Mine to go there and examine, and report as to is future prospects. Agreeable to this request, I went to the mine, which I found worked 57 fathoms under the adit, with only one shaft; the mines were badly ventilated. A new shaft was sinking, called "Bartlett's Shaft," which was never sunk through by that party. I found the lode what is generally termed a small one, with a shoot of ore ground about the engine-shaft, from 40 to 60 fathoms in length; nearly all this ground was worked away—the lode had been partially worked in some of the levels as far north as Bartlett's shaft. I think your correspondent was misinformed if a stranger, or forgot himself if one of the men of old, when he says that the shaft had not been sunk for five years previous to its stopping, as I found little or none of the lode in the back of the 57 fathom level worked away. I found no plan, or section, kept on the mine, and had to make them, by which I now find that I let the pitch in the 57 fathom level, south of the shaft, at 1*l.* per ton, and the north one at 1*l.* 10s.; it is not likely they left these backs standing for five years.

I also find I remarked on the section as to what I set every pitch for in the upper level, which averaged from 3*l.* to 4*l.* per ton—the company paying dressing charges; the pitches were near all taken below what I considered a remunerating price, in consequence of the company allowing the men to draw high subsist. I went there for two or three months, and let all the work, when the company, in consequence of a miscalculation as to the depth that the lode would be cut in Bartlett's, came to the conclusion of taking out all they could, and abandon the mine, which I think took them a few months. Its being coupled with East Wheals Rose, as to strata and nature of the lode, might as well have been left out of the question, as every practical miner must know that it is not unlikely that there are 50 changes of strata between this and Wheal Rose, neither does any practical man who has seen this district need any one to tell him that North and South Wheal Golden and Penhale is all in a very favourable lead strata; a single glance at it will convince most men that they need no Wheal Rose on that point; and I beg to throw out a few hints as to my views on these mines, by remarking that I am not an advocate for working deep mines, and more particularly lead mines, and would ask, how many could be pointed out in Devon and Cornwall that have paid expenses after they are 100 fathoms under the sea level, supposing them to be then dependent on what they got below that level, I think very few will be found; but no difficulty would be found in pointing out a great number of paying mines above that level. This mine being now sunk down to the 70 fm. level, and knowing as I do, and their agents must also be aware of it, that there is a quantity of untried ground intersected with cross-courses standing between South Wheal Golden and Penhale, as also between South and North Wheals Golden I venture to suggest that the mine should be ventilated, and the 60 fathom and 70 fashom levels extended through all this high ground, opening new backs, and the other mines unwatered; then I think there would be a far better chance of remunerating the shareholders than there will by continuing to sink South Wheal Golden. If the latter plan be persevered in, I venture to predict them very fortunate shareholders if they see a new penny for an old one. The reader may not be aware that Penhale was a very productive mine, and much better to be coupled with Wheal Golden than East Wheal Rose, as it is on the same lode, and in the same strata, within a very short distance, and is a very favourable strata for lead.—N. ERNON: *Washford, Taunton, Dec.* 24.

CAMERON'S COALBROOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.

A special general meeting of shareholders was held at the offices, Moorgate-street, on Thursday last, the 27th instant.

E. G. WINTHROP, Esq., in the chair.

Mr. HOWDEN (the secretary) having read the notice convening the meeting, the CHAIRMAN said, it was almost necessary to apologise for calling them together so soon after the last meeting; but, as it was compulsory under their deed that the resolutions then passed should be confirmed at a subsequent meeting, they had no alternative. They had now met to confirm the resolution for making the call of 2*l.* per share payable on the 6th March, 1850, and to re-resolve on the formation of the railway.

Previous to the resolution in confirmation of the call being made was put, Mr. SMALLBONE explained, that he knew many shareholders entertained the idea that they were making a 2*l.* call in addition to the last call of 1*l.* per share, which was not the fact; the call was for 2*l.*, but whoever had paid the last 1*l.* per share, would have but 1*l.* to pay in the present instance.—The resolution was then confirmed unanimously.

The resolution for making the railway was then read, when Mr. HALLETT said, he should be happy to put the resolution, but should be glad to know, if they set about making the line, how they were to pay for it?

The CHAIRMAN said, there was the present call, which would be something towards it, and they had about 4000 shares, which they might issue as preference shares; or they could borrow. The directors had well considered the subject in all its bearings, and were satisfied there was no particular difficulty; two different contractors had agreed to complete the line in three months—the company to pay 33 per cent. of the cost as the works proceeded, and the remainder, in one case, in 12 months, in the other, 18 months, from the commencement; it would be 2¾ miles in length, and its cost only 4500*l.*

Mr. ELDERTON said, he had had, within the last three days, an interview with another contractor, who offered still more advantageous terms.

The CHAIRMAN continued, he felt satisfied they had committed a preposterous error in commencing operations at all until they had completed the railway; that was now their only salvation; and he had no doubt that, from the day after its completion, when coals would be on their route to the shipping place, that a material change would be seen in their position and prospects, and the real value of the property be developed.—The resolution for making the railway and branches was then unanimously confirmed.

Mr. ELDERTON said, he had had, since the last meeting, an interview with Mr. Hooper, the solicitor to the Duke of Beaufort; and he was happy to say he believed they should come to an arrangement in passing over his Grace's land, most advantageous to the company.

A vote of thanks was then passed to the chairman, who, in reply, said that at the general meeting in July, he hoped he should have some information to give them of a highly satisfactory nature, and, in the meantime, he trusted all those who could would immediately respond to the call, or, at all events, by the time it was due. This would enable the directors to take advantage of circumstances, and he had not the slightest doubt but that the results would be most gratifying.

WHEAL BLENCOWE MINING COMPANY.

A general meeting was held on the 18th inst., when a statement of accounts was presented, showing balance of 110*l.* 16s. 11d. against the mine. A call of 10s. per share was made. Since the last general meeting, the adventurers have received information of the discovery of some promising lodes, running north of those recently worked upon, and it was, consequently, resolved that the resolution then passed for selling the materials and winding up the mine be rescinded, and that the 15 fm. level be driven as recommended by the captain. Capt. Webb was appointed to value the materials between those relinquishing their shares and the other adventurers. Accompanying the statement of accounts, the purser has issued the following report:—

Dec. 10.—The appointment of Capt. Webb to value the materials was fully approved of by such of the adventurers at the meeting as intend to relinquish their shares; and as such valuation will be proceeded with immediately, it is requested that any adventurer intending to relinquish, but has not yet sent a written notice of such intention to the purser, will do so before the 30th inst., in order that such person may avoid all liabilities beyond those already incurred, for which the adventurers are at present answerable. I think it right to state, for the information of those adventurers who did not attend the meeting, that there are certain liabilities, the amount of which cannot at present be ascertained, as the negociations for reducing them to the lowest possible amount are still pending; but every effort shall be made to bring them to a close, that retiring shareholders may be released from their responsibilities at the earliest period possible. A remittance for the amount due upon each share is requested to be paid immediately.

CRADDOCK MOOR MINING COMPANY.

At the two-monthly meeting of adventurers, held at Liskeard, on the 21st inst., the accounts were examined and passed, showing—Cells, 105*l.* 10s.; balance last account, 23*l.* 5s. 1d.=128*l.* 15s. 1d.; by labour cost, September and October, 38*l.* 12s.; materials, 8*l.* 15s.; leaving balance in favour of adventurers, 81*l.* 8s. 1d. A call of 10s. per share was made, and the following report, from Captain H. Taylor, was read to the meeting:—

The cross-course in the 70 fm. level in West Caradon has been driven on 4 fms. north towards Craddock Moor sett, and was found as well defined, and its walls as regular, as we have it in Craddock Moor; but for want of better ventilation, it would be difficult to continue this driving; and I thought it best to sink the shaft at once, as by so doing we shall come at the object sooner, and prove it more effectually. We could not think of moving the engine now in the winter, and, therefore, have stripped the south shaft, and fixed rods and stands from the engine to the new shaft. We have also put the lift in the shaft, and divided and cased it down; and have commenced sinking at 10*l.* 10s. per fm.

GONAMENA MINING COMPANY.

At the two-monthly meeting of adventurers, held at Liskeard, on the 21st inst., the accounts were examined and passed, showing—Balance last account 287*l.* 0s. 1d.; by labour cost, September and October, 119*l.* 1s. 7d.; merchants' bills, 18*l.* 17s. 5d.; leaving balance in favour of adventurers, 149*l.* 1s. 1d. The following report, from Captain John Buzza, was read:—

Taylor's lode, in the 17 fm. level, is 12 inches wide, producing half a ton per fm. In the 38 fm. level, on Taylor's lode, the men are rising, to meet a winze now sinking in the bottom of the 17. The 60 fm. level, on Gilpin's lode, was peor when the men left it; they have lately been stoping the back, where they have broken about 30 tons of ore; they will commence driving the end again in a few days. The 80 cross-cut north is driven 30 fms. from Dunstan's lode towards Gilpin's lode: we hope to cut the lode in this level in two months.

LAMHEROOE WHEAL MARIA MINING COMPANY.

A general meeting of shareholders was held at the offices, King-street, on Thursday, the 27th instant.

GEORGE EDWARDS, Esq. in the chair.

After the usual preliminary business, the SECRETARY read the following report from Mr. Adam Murray, jun., on the mine, and the district generally:—

"These mines are situate about one mile and a half west of the Devon Great Consols, and in the same important channel of country. They are bounded on the south by the granite of Heigniston Down and Kitt Hill and the Callington Mines, and towards the north and west by property only slightly explored for minerals, and nearly surrounded by the Tamar river. The great feature of this district, that which has rendered it so important, is the Great Wheal Maria lode, which takes its course through the centre of this sett, under similar conditions as in Great Devon Consols. On tracing this great lode after its heave of nearly 100 fms. in the Great Devon Consols, it appears to be almost obliterated in its western course on entering the Wheal Fortescue sett, but this is due to the intervention of a course of metamorphose schists, or a compact talcose clay-slate, interstratified with volcanic ash, commencing at this point to overlay the argillaceous rocks below, where the lode will, most probably, be found unaltered, and of its original value. The Wheal Fortescue adventurers are proceeding to ascertain this fact by sinking through this hard rock at Capel Tor. Some other endeavours were made at Wheal Williams, where the lode crosses to the south side of the Tamar, but without success; for the shafts, when the mine was abandoned, were evidently not sunk deep enough to pierce the overlapping hard stratification. As no other endeavours have been made, or brought to a fair issue, the fact of the Great Wheal Maria lode existing in a rich state to the west of Great Devon Consols can only rest on probability at present. This probability is certainly very much in favour of Lamheroee sett, on this account, that the stratification cut in the lower part of the shafts is of indentically the same channel—soft argillaceous felspathic schists—as the metalliferous strata of Devon Consols, and intersected by similar cross-courses heaving its lodes."

Mr. Murray then enters into a particular description of the 11 lodes of copper and tin contained in the Lamheroee Mine, and thus concludes—"In reviewing the position and workings on these 11 lodes, the probabilities are not in favour of immediate results in the mine, though the prospects are good. The great work has been done, so far, in getting the shafts down beneath the influence of the super-strata, but the work would have been much better accomplished if one of these shafts had been sunk further northward, so as to have commanded the Wheal Maria lode, instead of being 51 fms. to the south of it, whilst the lode underlays northward, making a cross-cut at the 60 fm. level, equal to 70 or 80 fathoms. The working at Davey's shaft may be more speedy in making returns by cutting the lodes Nos. 9. 10, and 11, and driving on them. But with the present monthly cost of the engine and pumps, amounting to 108*l.* with the items for agency, &c., attendant on the establishment, making a permanent cost of 127*l.* per month, it would be advisable under such circumstances to work these underground levels as expeditiously as possible. Therefore, at the engine-shaft, six men might be employed in cross-cutting north, and six men exploring the lode cut, and in Davey's the same number of men might be most judiciously employed cross-cutting both north and south. This addition of 24 tutwork men to the permanent cost of 127*l.* monthly would add 76*l.*, which with 18*l.* for candles, powder, iron, steel, safety, &c., would amount in all to 215*l.* per month. The No. 6 lode at the engine-shaft, and lodes Nos. 9 and 10 at Davey's, may produce results speedily, to partly cover the cost, and the cross-course, as yet very little seen, may be very productive in lead, but the important feature in the mine—Wheal Maria lode—cannot be intersected at the 60 fm. in less than 16 months."

The accounts submitted showed the liabilities to be, including November cost (240*l.* 12s. 5d.), 731*l.* 16s. 3d.; assets, 650*l.* 12s. 2d.: leaving balance against the mine, 81*l.* 4s. 1d.—A call of 2*l.* per share was made, payable by instalments —10s. on or before the 10th January next, and the remaining 30s. per share in three equal payments of 10s. every four months. Sundry resolutions were then passed, for which see our advertising columns.

WEST CARADON MINING COMPANY.

At the two-monthly meeting of adventurers, held at Liskeard on the 21st inst., the accounts were examined and passed, showing—Ores sold 18th Oct., 253*5l.* 3s. 9d.; carriage paid by purchasers, 71*l.* 16s. 10d.; ores sold 22d Nov., 2392*l.* 0s. 9d.; carriage, 80*l.* 1s.; materials sold, 26*l.* 12s. 11d.; dividend on Liskeard and Caradon Railway shares, 31*l.* 5s.=4819*l.* 14s. 6d.—By labour cost, 3259*l.* 15s. 7d.; merchants' bills, 804*l.* 14s. 5d.; law expenses, 50*l.*; leaving a profit of 705*l.* 4s. 6d.; to which add balance last account, 1200*l.* 13s. 10d. =1904*l.* 18s. 4d., from which deduct dividend, 50s. per share, 640*l.*, leaves balance in favour of adventurers, 1265*l.* 18s. 4d.

WHEAL TREHANE MINING COMPANY.

The bi-monthly account meeting was held on the 19th inst., when a balance of 1060*l.* 14s. 2d. was found in favour of the company, and a dividend of 30s. per share was declared. The statement of accounts for July and Aug. showed —Balance in hand, 1020*l.* 17s. 7d.; silver-lead ore sold to Messrs. Pontifex and and Wood, Oct. 16, 1330*l.* 1s.=2350*l.* 18s. 7d.—Labour cost, 582*l.* 10s. 8d.; materials, 167*l.* 13s. 9d.; Trelawney adventurers, for use of engine and water, 55*l.*; dividend declared 15th Oct., 384*l.*; lords' dues on ore sold 16th Oct., 86*l.* 14s.; E. H. Pedler, for lease of further grant, 14*l.* 6s.—leaving balance in favour of adventurers, 1060*l.* 14s. 2d.—The following report was presented to the meeting:—

Dec. 19.—Kelly's shaft is sunk 10 fms. 2 ft. below the 68 fm. level, and a 78 fm. cross-cut driven 4 ft. towards the lode in moderate ground; we shall intersect the lode here in a few days, if the ground continues as at present. In the 68 fm. level south the lode has produced, on an average, in the last 6 fms. driving, about 1 ton of lead per fm.; the ground passed through has been hard, but in the present end it is easier, and the lode is worth 18*l.* per fm.; the lode in the stopes in the back of this level, both north and south of the rise, is producing 12 cwts. of lead per fm. In the north end, in this level, the lode is 3 ft. wide, and worth 8*l.* per fm., ground easy for driving; the last 8 fms. has produced 7 cwts. of lead per fm. In the stopes in the back of the 62 fm. level the lode is worth 15*l.* per fm. The lode in the stopes in the back of the 55 fm. level is producing 8 cwts. of lead per fm. The stopes in the back of the 45, and bottom of the 35 fm. levels are producing 7 cwts. per fm. The ground in the cross-cut, driving west in the 30 fm. level, is favourable for driving, and letting out a little more water. We sampled, on Friday last, a parcel of rich ore, computed 58 tons, to be sold on Saturday next. The engine-house is in order to receive the engine, and some parts of it are on the mine.

PLYMOUTH WHEAL YEOLAND.—A parcel of tin has just been sold, weighing 4 tons 14 cwts. 2 qrs. 27 lbs., producing 208*l.* 12s. 5d.—4 tons 9 cwts. of which realised the price of 44*l.* 10s. per ton.

SOUTH WHEAL BASSET.—We stated in our City Article, last week, that the new 60-in. cylinder engine was to be erected in this part of the Wheal Basset property. This was an error; the 40-in. cylinder engine, in the eastern part of the sett, not being sufficient for the work, the 60-in. engine will be placed there; and, when required, the 40-in. will be removed to the south.

VIRTUOUS LADY AND BEDFORD.—We noticed, some months since, that these mines were put to work again, but have heard nothing of them from that period. This has arisen, we find, from the circumstance of their being at present worked by a single adventurer, who, having succeeded in getting fresh setts for 21 years, at 1-15th dues, has, in the last two or three months, prosecuted the workings, and his spirited exertions are likely to be amply rewarded. These mines are of very novel character, and have often excited the curiosity of the naturalist and miner, hundreds of whom have yearly gone to visit them. Although the deepest level is only 24 fathoms, it is well known these mines were worked upwards of 150 years ago, and when they were commenced is unknown. Immense riches have been produced from them; the late Capt. Williams, who held a large interest in the late company, realised a large fortune in a few years; and there are now caverns extending hundreds of fathoms in length, and many fathoms in width and height, from whence solid masses of ore have been extracted by the men of old. The late company were very successful in their operations till almost eight years since, when they lost the lode, and the endeavours of the late Capt. Williams, to the period of his death, were not only unsuccessful in again discovering it, but for six years preceding his death no ores were sold. The present adventurer has been more fortunate; in driving a cross-cut from the 24 fm. level, they have intersected a lode of immense size, with every appearance of being as extensive as any that have yet been known there, from which about 50 tons of copper ore were sold about two months since, 54 tons more to Messrs. Vivian last week, and another 50 will be ready for sale in the second week in Jan. The first lot produced 5½, the second 6½, and the next is expected to produce about 8 per cent. So that the lode continues to improve in richness, and as several sets of tributers have been set to work in other parts of the mine, large returns are expected in the ensuing year. These mines are situated about two miles from Tavistock, and about three from Great Wh. Maria.

IRON ORES OF NOVA SCOTIA.

Our readers, particularly those connected with the manufacture of iron, will recollect that, during the middle of last year, several advertisements and notices appeared in the *Mining Journal* relative to the formation of a company for working some extensive deposits of iron ore, situate in the township of Londonderry, in Nova Scotia. The party who was then under agreement for the tract of land upon which these mineral riches are situated has, we understand, allowed his right of possession to lapse, and they are, with the exception of the small part originally granted by the Crown to the party above mentioned, now in the hands of a gentleman who, we think, is progressing in the right direction, not only to realise large individual advantages, but even to effect a great public good. These ores are of a character most applicable to the manufacture of charcoal iron and steel, and being in the immediate neighbourhood of water carriage into the Bay of Fundy, the manufacture of every description of iron could be carried on in these localities at prices with which probably no other spot on the face of the globe can compete. We have, during the past week, had an opportunity of examining a variety of specimens of the different descriptions of mineral, and they are all of a highly-interesting character; while from analyses made by Dr. Jackson in the United States, Mr. Mushet in England, and other eminent mineralogists, it appears they are entirely free from sulphur, arsenic, and other impurities and alloys, which so materially deteriorate most iron ores of all countries. Some of them are highly magnetic, and there is one kind which, during its deposit, has been the grave of myriads of shelly animals, the elements of which have become so identified with the ore, that it actually carries with it its own flux, and that in a proportion so nice, that it could not be amended by the most careful mechanical mixture. We saw some steel tools which had been formed from iron run down from this ore without the addition of a particle of matter to act as a solvent, besides the fuel necessary to its reduction. The ore in heating decrepitates, exposing a large surface to the fire, and very quickly runs down, leaving the slag, or glass, produced by the carbonate of lime contained in it, floating on the surface. These ores, though differing in productiveness, varying from 36 to 76 per cent. of pure iron, are all exceedingly free from impurities of any description, and are found, under varying circumstances, deposited in beds similar to the iron-stone deposits of the coal measures—in true veins nearly perpendicular—and coming out to surface on the mountains, widening as they get deeper, with every facility for working.

The geological features of the country are silurian slates, and the cleavage and dip of the strata render it easy to obtain by pick and hammer, blasting only occasionally having to be resorted to. There are inexhaustible supplies of coal, which could be used for common pig-iron; and the interminable forests on the slopes and summits of the mountains, which from the character of the ground must ever remain forests, will for ages supply charcoal for the formation of charcoal iron and steel, for which a market could be found in all parts of the civilised world, at prices which, while realising large profits to the parties working the mineral, could be delivered at Liverpool for less per ton than the cost of the *fuel alone* for the manufacture of similar iron in England. There is also abundance of fire-clay of excellent quality, several extensive deposits of ochres of different shades of red and yellow, one of which has been dug 40 feet in depth without meeting with any deteriorating strata—in fact, Nature seems here to have deposited a combination of mineral wealth, which appears, from the opinions expressed by practical men, to be almost unexampled, and which must, with anything like management, prove highly advantageous to the proprietor, and those gentlemen who may associate with him in its development. We expect again shortly to revert at greater length to the subject, and, in the interim, a number of interesting specimens may be inspected at our office.

SEWAGE MANURE OF THE METROPOLIS.—At a period like the present, when an efficient drainage of the metropolis, and other large cities and towns, without deteriorating the waters of the neighbouring streams, is such a desideratum, it will be highly satisfactory to all parties, who take an interest in so important a subject, to know that one great principle in furtherance of such improved drainage is fully established—that the products of the sewers is practically valuable, and may be turned to highly remunerative account. From the last report of the directors of the Metropolitan Sewage Manure Company, we learn that, after a trial of this great commercial, agricultural, and national experiment, they are gratified in being enabled to announce its complete success. In four months since the completion of their machinery for its distribution, they have obtained 25 occupiers of market garden land as tenants for a constant supply, over 100 acres, at an annual rental of 400*l*. This, however, is only about 1-18th of what, by the company's arrangements, they are now enabled to supply, and when the remaining occupiers in the neighbourhood of Fulham shall avail themselves of the advantages offered, the rental will reach 5000*l*. per annum, which will pay a dividend of 10 per cent. on the capital invested. An extension of the works to supply 10,000 acres is in contemplation, which is estimated to require an outlay of 107,227*l*., but will return a dividend of 23 per cent., giving an average of 18 per cent. per annum on the entire operations of the company. From the testimonials which accompany the report, from a number of market gardeners and private gentlemen, who have had recourse to the sewage manure, it appears the results are most satisfactory, increasing the growth, and improving the quality of vegetables and fruit, particularly those of the cabbage kind, beans, kale, celery, strawberries, &c., and having a marked effect on grass land, when watered after mowing. It has also destroyed the fly in French beans and scarlet runners, and is expected, when tried, to have a like effect on the green aphis, that pest to the grower of roses. It being thus proved that the sewage is of positive value, the question of expense in the improvement of drainage becomes a secondary consideration, as there is now evidence that the return will, to a considerable extent, repay the outlay.

A NEW TELEGRAPH COMPANY.—A new telegraph company has been recently formed, under the firm of House, Brett, and Wilmer, who, it is said, are to introduce their form of telegraph into various countries; Mr. House, who is an American, to have the management of the business in the United States, Mr. Brett over the continent of Europe, and Mr. Wilmer in this country. We learn that a recent trial from London to Norwich proved to be eminently successful. This principle of telegraph possesses several claims to public favour. It requires only one wire; and it prints the communication legibly in capitals, on long narrow strips of paper, so that what is spelled at London by the sender is printed at Norwich, and the whole responsibility and risk of the receiving clerks, and the most prolific source of error in transmission, are wholly got rid of. Instead of working two needles by handles, the operator plays on keys like those of a pianoforte, each key, on being pressed down, printing a capital letter on the paper at the other terminus of the wire. This is not only more accurate in its operation, but it will save much time now lost in various ways between sender and receiver. In fact, the instrument is a tell-tale, and a self-acting printing machine, or copyist.—*Manchester Guardian.*

CORNISH STEAM-ENGINES.

[Abstract from Browne's *Cornish Engine Reporter*, from Nov. 21 to Dec. 20, 1849.]

PUMPING-ENGINES.

Number reported	29
Average load per square inch on the piston, in lbs.	13·0
Average number of strokes per minute	8·7
Gallons of water drawn per minute	6179
Average duty of 20 engines—being million lbs. lifted 1 foot high, by the consumption of 1 cwt. of coals	65·1
Actual horse-power employed per minute	1209·1
Average consumption of coals per horse-power per hour, in lbs.	3·9

ROTARY-ENGINES—WHIMS.

Number reported	20
Number of kibbles drawn	75,367
Average depth of drawing, in fathoms	134·3
Average number of horse-whim kibbles drawn the average depth, by consuming 1 cwt. of coals	51·7
Average duty of 13 engines, as above	17·8

STAMPS.

Number reported	7
Average number of strokes per minute	13·8
Average duty of 5 engines, as above	40·7
Actual horse-power employed per minute	142·9

PUMPING-ENGINES DOING HIGHEST DUTY.

Par Consols	80-inch single	*Millions*	97·6
Fowey Consols	80-inch single		95·4
Great Polgooth	80-inch single		86·8
Par Consols	72 and 36-inch Sims's combined		83·1
Trelawny	50-inch single		81·2
Stray Park	60-inch single		76·8
Callington	50-inch single		76·2
North Pool	50-inchsingle		71·9

WHIM-ENGINES.

Fowey Consols	22-inch double	*Millions*	31·9
Fowey Consols	22-inch double		28·5
Par Consols	34 & 13-inch Sims's combined		28·3
Par Consols	24-inch single		18·8
Great Polgooth	22-inch double		16·6
Great Polgooth	22-inch ditto		16·0

STAMPING-ENGINES.

Great Polgooth	35-inch double	*Millions*	57·5
South Caradon	26-inch single		48·9
Lewis Mines	52 and 28-inch Sim's combined		49·6

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—The 60 fm. level, east of Field's engine shaft, is quite as good as it was when last reported, and the pitwork is completed for sinking. As soon as Christmas-day is past, the whole of the men will commence sinking in the bottom of the mine—that is, the 60 fm. level east and west—also the sinking of the engine-shaft. The engine was idle all Saturday night, getting the new boiler to work, in consequence of which the water is not yet drained to the bottom of the mine, but will be about midday to-morrow. Our copper sampling this day is as follows—viz., 37 tons, principally from the 60 fm. level.

BARRISTOWN.—The end, driving on the new lode, is much the same as last reported—lode 20 in. wide in the bottom, and producing about 1 ton of lead per fm.; the back of this level, stoping on tribute, is producing about 8 cwts. of lead per fm. We have commenced to draw the water out of Slob shaft; and to prevent the cost from being too high, we have taken the men who were sinking in the bottom of the 24 fm. level (which can be resumed some future time); there will be a cross-cut communicated from Slob shaft to the new lode, 14 fms. under the 18 fm. level, in about six weeks from the time, which will be about 2 fms. under the present end now driving; this will leave 2 fms. high of ore ground to take away for the length of this level. The lode in the bottom of the adit level is rather improved in the past week, and there is some appearance of the ore going under the 16 fm. level in a pipe against the slide.

BEDFORD UNITED.—The ground in the engine-shaft is a little more favourable for sinking. In the 103 fm. level east we are driving by the side of the lode; in this level, west of Bailey's winze, the lode is 3 ft. wide, saving work; in this level east there has been no lode taken down. The lode in the 90 fm. level east is 18 in. wide, producing some saving work; in the winze in this level the lode is 3 ft. wide, producing 7 tons of ore per fm. In the 76 fm. level we continue to drive by the side of the lode.

CARTHEW CONSOLS.—At the upper mine, in my last report, I intimated it was my intention after Tuesday, the 18th of Dec., to put six men immediately to drive the 65 fm. level end south, but finding it necessary, and indispensible, to cut a plat in this level ere we went further, I have since that time engaged the men in so doing, which piece of work is now quite completed, and on Monday we shall commence first operations in either end in this level—*i. e.*, clearing the one north, and driving the other south in new ground. The lode in the 48 fm. level end south is getting more settled, and looks more promising, and in the 28 fm. level we are breaking good work in lead, but not in great quantities—the appearances in this end are very good indeed. In tribute I can report of nothing very different from last week. At the lower mine, the lode in the adit end is very much improved in its appearance this week, and looks far better than for a considerable time past.

CWM ERFIN.—There is no alteration in either one of our bargains since my last report. We have not made a communication to Robarts's as yet. The frost is rather against us at present for our dressing, but still we are getting on with most of our dressing, except the slimes.

DEVON AND COURTENAY.—We have driven north of the 40 fm. level, and intersected the north part that diverged from the lode some 3 or 4 fms. behind the end; the branch is small, and appears to be inclining in a westerly direction; the distance from the south to the north part of the lode is about 6 ft. In the end driving east, on the gossan lode, in the 50 fm. level, the lode is 2½ ft. wide, composed of spar, with killas and good stones of ore in the north part of the lode. The ground in the engine-shaft, under the 50 fm. level, is without any alteration since my last report. The pitches are producing some good work.

DYFNGWM.—The agent (Dec. 19) states that since last report he has no reason to alter his opinion as to the promising general prospects of the mine. The engine-shaft is down 7 fms. 3 ft. 6 in. below the 22 fm. level, and by end of January, 1850, expected to be complete to the 32 fm. level, and pitwork fixed. The adit level east is in good working order, and will not require any further outlay for many years; the lode at present produces but little ore, but in the sink from the bottom of this to the 22 fm. level, it is said that the lode is large and orey throughout. The adit level west is cleared, timbered and secured, to sink on steel ore. There is some good orey ground in the bottom of this level. A productive stope is set to two men. In the 16 fm. level the sink on the steel ore is cleared up, and the lode found to be productive, the ore of excellent quality. It will be advisable to let these stopes remain idle until the rise from the 22 fm. level is holed, which is distant about 7 fms. The lode in Davies' stopes, in the 22 fm. level east, is large, producing 1 ton of ore per fm.; the stope in the bottom of this level is in good orey ground, which will leave remunerative returns, but these stopes generally cannot be worked advantageously until the engine-shaft is down to a 32 fm. level. Tudor's stopes, in the bottom of the 22 fm. level, west of shaft, are producing 2 tons of ore per fm. The shoot of ore is dipping east, and I expect that the lode will be found very productive in the 32 fm. level, opposite the engine-shaft. Three small branches had been cut with lead throughout, one 1½ inch wide, and the others 2 and 3 inches wide. Jones's stopes, for 12 fms. in length, are producing 1 ton of ore per fathom, with every indication of improving. The men employed in stoping are raising some excellent ore, better I never saw in any part of the mine when I visited it last. In Young's cross-cut the lode has been intersected, and driven in a disordered state, and but little ore. In the dressing department, the stamps are being erected, and, with fair weather, will be complete in a month. The ore at present broken, and expected to be raised in six months, from 1st Feb. next, is estimated at 120 tons.

EAST CROWNDALE.—At Rix Hill, the lode in the 28 fm. level east has been driven on about 9 fms. 6 in., which has laid open good tribute ground. The 28 fm. level west has been driven about 8 fms. 6 in. through good ore ground; the present end is now poor, but a very kindly lode, composed of mundic, prian, peach, and copper, and ground favourable for driving. We shall set two new pitches in the back of the 28 next setting-day, the tribute will not exceed 8*s.* in 1*l.* Our tribute in the back of the 17 fm. level looks well, and will set at a lower tribute next setting-day, with the present prospects. I recommend driving another level before sinking either shaft, by that time we shall be able to judge whether the engine or the middle shaft should be first sunk. We calculate on sampling 8 tons of tin for November and December on the 8th January, if we are not prevented by frost in dressing, the proceeds of which I calculate will be full 360*l.*, which will more than cover our cost for the two months, and I am happy to inform you that our future returns will increase.

EAST POOL.—The 120 fathom level is driven west of engine-shaft about 15 fms.; the lode is 18 in. wide, at present poor, nor do we expect ore in this level until we have driven 10 fms. farther west. The 110 fm. level is driven 12 fms. west of cross-course, through tribute ground; the present end looks very promising, worth about 9*l.* per fathom. The 100 fm. level is driven west of cross-course through 20 fms. of tribute ground; the present end is poor, but we expect to find more lode to the south, as it is split some fathoms behind the end. The 90 fm. level is driven west of cross-course about 35 fms. through tribute ground; the lode, for the last 10 fms., has been worth 10*l.* per fm.—the men are now rising in the back at 7*s.* 6*d.* in 1*l.*; the winze sinking in the bottom of this level, 7 fms. west of the 100 end, is worth 6*l.* per fm; at present there is water in this winze, and the men are stoping the west end of it, which is worth 9*l.* per fm. In the 90 fm. level, driving west of cross-course, on the north lode, the lode is small and poor. In the 43 fm. level, driving east from East Wheal Crofty, on Reeves's lode, we have driven through 3 or 4 fms. of tribute ground, but the present end is poor. We have to drive this level 4 fms. to get under our 35 end, with which we hope to communicate in the course of the next two months. In the 100 cross-cut, driving south to cut the north Tincroft lode, we have driven about 65 fms.—the ground is harder than it has been. We have discovered some branches containing spots of copper ore, and expect to cut the lode very shortly. In the 16 fm. level, on the south lode, we are working with six men at 3*s.* in 1*l.*; the lode in the east end is worth 30*l.* per fm., and the appearance in the west is good. [The above report was read at the meeting, held at the mine on the 18th inst., the particulars of which appeared in our last Journal.]

ESGAIR LLEE.—The north lode in the deep adit, east of the cross-cut, is much the same—stones of lead, but not sufficient to set a value on. The lode in Morgan's winze below the 12 fm. level is from 4 to 5 ft. wide, composed principally of compact slate, and producing some stones of lead; the caunter lode in the 12 fm. level, east from surface, is looking promising, and producing some very good gossan; we have holed the shallow adit west of Morgan's winze, on the caunter lode, to the one east from surface, and we are now driving north from the shallow adit 10 fms. west of Morgan's winze, to prove the size of the caunter lode; we have not yet cut the cauntar lode in the deep adit east from the base of the hill. The second party have left the engine-shaft, and a third one taken it till next survey day at the former price (11*l.* per fathom).

HEIGNSTON DOWN CONSOLS.—The lode in the 20 fm. level, west of Hitchens's shaft, maintains its size and character. The lode in the 35 fm. level, east of cross-cut, is improved in the past week; there is at present a leader of copper ore, 9 in. wide, of superior quality, with indications of greater improvement; the winze sinking below this level is without important alteration. The branch alluded to in the 45 fathom cross-cut is improved since my last, both in size and quality.

HOLMBUSH.—The 120 fm. level south, on lead lode, has not been wrought on since last reported; the water is abated, and we hope to resume operations there shortly. The ground in the 120 fm level south, towards the flapjack lode, is improved. The lode in the 110 fm. level south is 4 ft. wide, composed of quartz, prian, and stones of lead. The flapjack lode in the 100 fm. level, east of the great cross-course, is 2½ ft. wide, and will produce about 3 tons of copper ore per fm. The pitch in the back of the 120 fm. level, on the lead lode, is still very productive.

KIRKCUDBRIGHTSHIRE.—At Stewart's shaft the lode is 5 ft. wide, a fine spar, with spots of ore through it. The lode in the 62 west is 3 ft. wide, yielding 6 cwts. of lead per fm.; the winze over this end is making about the same quantity of ore; we have holed the rise in the 62 east to the winze. The lode in the 50 west became very slight for ore in the beginning of the week, but it has improved again, having fine stones of ore through it now, and the lode opening.

KITT HILL MINE.—After the general meeting held in March last, an adit level was commenced driving south from the Clitter to intersect the different lodes on which the old tinners have made considerable workings on the backs. This level is termed the middle adit, and will obtain a depth of 45 fms. from the top of the hill. After this level had been driven a distance of 12 fms. from its mouth, a large tin lode was cut, about 5 ft. big, underlying a little south. From samples taken of this lode, I estimate its worth to be about 20*l.* per fm.; and as it was cut only 4 fms. under the surface, there is every reason to suppose the lode will increase in value in depth; and as the backs rise, by driving west on its course to a depth of 35 fms., I should recommend its being immediately driven on, as I can confidently state that, should it continue only as good as cut, I can make returns from it immediately of 80*l.* per month, and steadily increase them to 250*l.* in six months, at an outlay of from 35*l.* to 120*l.* per month. This middle adit is driven altogether 38 fms., and a railroad has been laid for bringing out the stuff. In driving, we have recently intersected a cross-course, which will materially reduce the expense of continuing this adit, and in about 6 fms. driving I expect to cut another lode. The deep adit north, driven before I was appointed agent 40 fms., with the intention of cutting the Holmbush lodes, has been continued driving; it is 45 fms. deeper than the middle adit. This level is now 58 fms. 4 ft. in length, and is nearly under the perpendicular of the first lode, presumed to be the Holmbush copper lode. This lode I expect to cut soon, and is fully 30 fms. deep. After this lode is cut, the next lode met with will be the flapjack lode; these lodes form a junction in the East Kitt Hill sett. The old tinners have worked very extensively on the backs of these lodes, and from the rich specimens of tin found at the surface from time to time, I expect these lodes to cut very rich. One solid rock of tin, found a few weeks since, weighed 160 lbs., and, after having been broken, now weighs 138 lbs., and is nearly solid tin. A pitch has been set in the shallow adit at 13*s.* 4*d.* in 1*l.*, and the tributers are getting good wages. Tributers are also returning tin at 10*s.* in 1*l.* from other parts of the sett at surface. As this hill contains some of the most productive lodes in the neighbourhood, I have no hesitation in saying that, were steam stamping power erected, very large returns could now be made monthly. I should recommend that a steam-engine be immediately erected in the Clitter for stamping, and of sufficient power to be available for sinking, and I should also recommend that a shaft be commenced between this sett and East Kitt Hill sett at the joint expense of the two companies, if the adventurers in that sett are disposed to join in such an undertaking. This would enable you to make returns from the lodes adjoining East Kitt Hill sett, and try them in depth at a moderate expense; while the adits now driving are quite sufficient to produce returns for many years to come from the lodes westward. Another water-wheel should also be erected to work another set of stamps; this would enable you to make considerable returns for many months in the year; but in the summer season, from the failing back of the springs, it could not be depended on for doing much work. The work done since my last report has been, driving the middle adit nearly 38 fms. south, and railway lain; the deep adit has been continued on nearly 20 fms. south, and railway nearly complete. The shallow adit has been cleared out and secured to the engine-shaft, and a lobby has been driven and two promising tinny lodes cut north about 8 fms. below the middle adit. The smiths'-shop and a material-house have been built, and an office and residence for the agent on the mine have been completed and fitted up. I have also set for driving an intermediate adit between the deep and middle adit below the lobby in which the two promising lodes were seen, and which will be cut 40 fms. deep, and I expect shortly to cut in this adit a larger and more promising lode about 5 fathoms deep. There is also another adit to the west nearly up to these lodes, from which and our new adit east, if they cut as I expect, very large returns of tin must be almost immediately made. We have constantly abundant water for dressing, and now only want adequate stamping power, not only to pay cost, but to enable you to declare dividends.

SOUTH WHEAL TRELAWNY.—The engine-shaft is suspended. We have commenced driving the cross-cut both east and west of the engine-shaft; the ground is favourable; also the strata, composed of a deep blue killas. Things are in good working order.

SOUTH WALES MINES.—The south lode in the deep adit, east of the Rhydnet river, is much the same as last reported, being 2 or 10 ft. wide, composed principally of mundic, quartz, white clay, and a little lead. The lode in the winze, under the deep adit, is looking promising, producing some copper and a little lead. The lode in the shallow adit east, 10 fms. above the deep adit, is 10 ft. wide, composed of a good gossan, mundic, copper, quartz, and clay, and looking promising.

TRELEIGH CONSOLS.—In the 125 cross-cut, at Garden's shaft, driving towards the lode, ground wet. In the 100, west of Garden's, lode 2 ft. wide, with stones of ore. In the 90, west of ditto, lode 18 in. wide, with good stones of ore. In the 80, west of cross-cut, on the north part, lode 3 ft. wide, worth 20*l.* per fm.; in the 80, west of ditto, on the south part, lode 2 ft. wide, with stones of ore, and looking kindly. In the 70, west of Garden's, lode 3½ ft. wide, with stones of ore. At Wheal Parent, in the 40, east of engine-shaft, lode 2½ ft. wide, with stones of ore, and looking more kindly. In the 40, west of ditto, lode 2 ft. wide, with stones of ore. In the 30, east of ditto, lode 20 in. wide, with good stones of ore. In the winze below the 30, lode 3 ft. wide, worth 16*l.* per fm. In the 30, west of engine-shaft, lode 2 ft. wide, poor. On the middle lode, the adit, east of Nicholson's shaft, lode 15 in. wide, with good stones of ore, looking kindly.

WEST WHEAL JEWEL.—In the 85 fm. level, west of Williams's cross-course, on Wheal Jewel lode, lode not taken down in the past week. In the 70 fm. level, west of ditto, on the same lode, lode when last taken down worth 20*l.* per fm. In the 47 fm. level, east of ditto, on the same lode, lode when last taken down worth 5*l.* per fm. No lode taken down in either of the levels on Tolcarne tin lode in the past week. In the stopes in the back of the 12 fm. level, west of Pryor's winze, on Tolcarne tin lode, lode worth 11*l.* per fm. In the stopes east of this winze, on the back of the same lode, lode worth 12*l.* per fm. In the stopes in the bottom of the 12 fm. level, east of Tregoning's shaft, on the same lode, lode worth 25*l.* per fm. In the stopes in the bottom of the 12 fm. level, west of Tregoning's winze, on the same lode, lode worth 23*l.* per fm. These stopes are working on tribute.

WHEAL TRELAWNY.—In the 82 end, north of Phillips's shaft, the lode is 3 ft. wide, worth 7*l.* per fm; in the 82, south of ditto, the lode is 3½ ft. wide, worth 7*l.* per fm. In the 72, north of ditto, the lode is 2½ ft. wide, worth 6*l.* per fm.; in the 72, south of ditto, the lode is 3 ft. wide, worth 6*l.* per fm. In the 62, north of ditto, the lode is 3½ ft. wide, worth 11*l.* per fm. Trelawny's shaft is cased and divided down to the 82, and the men are now engaged doing the necessary work to commence sinking, such as putting in the penthouse, &c., and which will not take many days. The cross-cut towards the lode in the 82 is driven 5½ fms., and we expect we have somewhere about 3 fms. more to drive to the lode. In the 72, north of this shaft, the lode is 3 ft. wide, worth 9*l.* per fm.; in the 72, south of ditto, the lode is 2½ ft. wide, worth 8*l.* per fm. In the 62, north of ditto, the lode is 2½ ft. wide, worth 14*l.* per fm. At the north mine, in the 52 end, north of Trehane, the lode is impregnated with lead, but not yet of much value. In the 40 end, north of Smith's shaft, the ground is getting firmer than it has been, and we expect that the lode will make a change, particularly as there is a good lode gone down before this end in the bottom of the 30. Nothing new to notice in the stopes. We sampled on Saturday last 102 tons, computed, of rich silver-lead ore. The water has prevented our obtaining ore, as heretofore, from the north ground.

WHEAL MARY ANN.—Pollard's shaft is sunk 8 fms. 2 ft. under the 50 fm. level. The lode in the 50 fm. level, north of the shaft, is 3 ft. wide, and worth 12*l.* per fm.; the lode in the same level south is 1½ ft. wide, and worth 5*l.* per fm. The lode in the 40 fm. level, south of the shaft, is 2 ft. wide, and worth 5*l.* per fm. The lode in the 30 fm. level, south of the shaft, is similar to my last report. The lode in the 15 fm. level, south of the shaft, is 1½ ft. wide, and of a promising character, but at present unproductive of lead. The lode in the 60 fm. level, south of Barratt's shaft, is 3 ft. wide, and worth 12*l.* per fm. The lode in the 50 fm. level, south of this shaft, is 2 ft. wide, and worth 7*l.* per fm. The stopes throughout the mine are producing a fair quantity of lead. On Friday last we sold two parcels of lead ore—No. 1.: 78 tons, to Messrs. Pontifex and Wood, at 17*l.* 4*s.* 6*d.* per ton; and No. 2, 68 tons, to Messrs. Robert Michell and Son, and the Penpoll Smelting Company, at 7*l.* 1*s.* per ton.

WHEAL PENHALE.—In going through the mine to day I find no important change since my last, neither in tutwork nor tribute. This week's development of the lode in the middle sheaft convinces me more strongly of its importance.

WHEAL VINCENT.—In driving the cross-cut from the eastern shaft we have just touched the caples of the lode, and let down such an immense quantity of water, that we are obliged to abandon it for a day or two, until the lodes are somewhat drained; however, from the indications visible, there is every probability of its being a productive lode. The other parts of the mine are looking well, but little has been done, it being Christmas week. I hope to report more fully in my next.

FOREIGN MINES.

IMPERIAL BRAZILIAN MINES.—*Bananal, Oct.* 18.—At Gongo, all the old workings in the mines must be abandoned, but the mode now adopted for the future working will discover and lay open to the surface nearly all the former workings above the 14 fm. level. At Bananal you are aware that nothing has been done in the points where remunerative produce is most expected—viz.: the bottom of the mine, more particularly Thomas's vein, which has been for some time past under water; this vein, I am told, yielded gold when last worked on, but pronounced to be poor; notwithstanding this, I have indeed very great hopes, that by a vigorous prosecution of the mine, not only in this spot, but many others, satisfactory results will follow—recent circumstances give strong grounds for such an opinion. Since January, of this year, 160 lbs. have been risen, and at some periods as much as 12 and 13 lbs. per day, all of which was found in a very small compass, as the excavations since that period have been very limited. This has considerably strengthened the hope I now entertain of successful results accruing from our future exertions; should a doubt exist with you as to the certainty of overcoming all difficulties, and of giving this mine an effectual prosecution, I wish, if possible, to remove it, for I am quite confident of carrying my point in this respect. The present machinery and pitwork are certainly most badly arranged and ill-combined. The pump-work that has been lately drawn to the surface from Gibson's shaft is quite out of proportion in the parts, consequently very defective; all this I have to put in good working order, which will, as I told you in England, cost time—nevertheless it can be done, and the mine effectually prosecuted. As soon as I have arranged matters so as to be working in the bottom of the mine (and I hope raising gold to pay the expenses), Santa Rita shall have my attention; the commencement of operations there will be the erection of a small stamping engine for trial purposes, and if satisfactory results follow, several of similar description may be employed, as the fall of water is great, and the formation almost inexhaustible. As to Gongo, no doubt exists with me as to the results of the new mode of prosecuting this property; when the open cutting reaches the old mine formation, and a large stamping power can be supplied from it, it is quite evident that great and satisfactory results will follow; this is not my opinion only, but I may say of every one here, both English and Brazilians, who are acquainted with the mine. The neighbourhood appear very glad to see active operations commenced again in Gongo, and seem confident that the company is again about to flourish. I have conversed with many of the leading and intelligent men on mining affairs in this district, whose words and opinions may be relied on, and they all agree that we shall be amply remunerated for our labour. I very well recollect when I was employed by the Cocaes Company (I think in 1835) of a great discovery being made at Gongo, in a piece of ground left standing as worthless in a very shallow part of the mine; it became necessary to retimber some of the old workings near this place for the better security of the deeper parts, and in doing which some gold was discovered and followed, and in a very inconsiderable space of time it was reported that upwards of 10,000*l.* sterling worth was taken out; accidental discoveries, similar to this, have since been made. It is, therefore, very probable that many more of these small bunches, having escaped the scrutiny of those who conducted the last workings, now exist, and which are sure to be discovered by the mode of prosecution now pursuing; you will, therefore, perceive that the favourable opinion I formed and expressed to you of the mines when I was in England, has not in the least deteriorated in my examination of them here. I regret I cannot make a greater dispatch in our preparatory workings, but I beg to assure you that every exertion and means, compatible with prudence and economy, are now using to this effect. The iron wheel from Rio, and the necessary supply of iron and stores have swollen the disbursements very considerably; however, this is not continuous, and after the new wheel is got to work, I hope the expenses will considerably diminish, and the produce of gold increase.

Bananal.—During the last 10 days we have had a few boxes of coarse work for the washing house, principally risen from the back of the 6 fathom level, on the big pump vein. Magelhaes winze has been communicated with the 14 fm. level; we intend extending this level longitudinally on the line, for the chance of discovering other shoots of gold; the other places in the mine, in course of prosecution, present nothing new, as will be seen by a reference to the captain's report. As I anticipated in my last, we have commenced sinking Gibson's shaft, below the 14 fm. level; the big pump vein is now in the bottom of the shaft, and to-day a tolerably promising sample has been taken from it; we may, therefore, expect some gold from this, as well as the Magelhaes vein, as we are now in a position to follow them in depth, and I hope, in about three months from this date, to make Gibson's shaft the deepest point in the mine, and, consequently, a drain for all the other parts; we shall then have Thomas's vein dry, which will very much facilitate the extraction of it. From the immense size of our pumps, our engine-shafts are not of sufficient capacity for pitwork and hauling purposes; it, therefore, became necessary to sink a new whim-shaft. It has been commenced, and I have taken the liberty to call it Gibbes's, out of respect to our director, Thomas Gibbes, Esq.; the sinking of it will not be expensive; the water has been drained from the ground; the shaft, consequently, will be sunk dry, and, I hope, expeditiously, by adopting the mode of working recommended in the captain's report; and when completed to the 14 fm. level, it will entirely supersede the present tedious and expensive way of drawing the stuff through Thomas's diagonal shaft.

Gongo Soco.—At this place we are getting on with the different works as fast as our limited force will allow. The open cutting has reached Goldsmid's stamps, and ere I write you again we must commence taking it to pieces, but shall re-erect it further down the stream. We have several free labourers employed in the open cutting, and in making researches in the western part of the mine. The great western stamps has been set to work with ten heads, she has given us about three-quarters of an ounce of gold in about 60 hours; the stuff supplied to her was miscellaneous, and was scarcely expected to yield anything, being merely put in as an experiment. You will be glad to observe by the medical report a continuation of the healthy state of our establishment, and I have great pleasure in adding that they are orderly and quiet.

Gold Report.

Gongo—From 3*d* to 12th October	*Lbs.*	3	0	0	0
Bananal—From 3*d* to 12th October		1	3	18	0—*Lbs.* 4 3 18 0

LINARES MINES.—The following has been received from Mr. H. Thomas:

Linares Dec. 18.—Since my last we have been occupied in the continuation of the work therein alluded to, and have cleared the 30 fm. level to San Gaspar winze, which we expect to be able to make available for sinking, or, rather, draining the water to the next

over, at the same time prosecuting the shaft under the Calavera winze, so as to have a drawing shaft available, and without which our draining the water will be useless. We have examined more of the 30 fm. level eastward, and find some very fine arches of lead standing, we think, better than has been stated in our reports of other parts of the mine. This part of the level, as well as the south lode, west of the engine-shaft, will not be available for tributers till we have made good the communication, by clearing the stuff lying in the level, which we shall do as quickly as the whim can draw it. We have now to report to you that we have commenced in our tribute department, by setting the back of the 30 fm. level on the north lode, between the two cross-cuts, shown in the plan, a distance of about 20 fms. to two pairs of men, at 3 reals per arroba, clean lead, the takers paying all costs. This should give them good wages, and is equal to about 2*l*. 10*s*. per ton. We have many better spots in sight, but this is at present the most accessible; the number of tributers will rapidly increase, as fast, I expect, as we shall be properly ready for them with the floors. I have made three assays of the 8 tons of ore found in clearing the Calavera winze, and the result in every instance gives 80 per cent. for lead. There are two main lodes, as I have before mentioned, in this mine, and both have very extensive workings on them; they cross each other about 30 fms. west of the engine-shaft, and are, fortunately, so close together that the same shafts will be available for both. There are also two minor lodes, or branches. The engine keeps the water at 6½ strokes per minute, and we hardly expect a reduction on this.

NATIONAL BRAZILIAN MINES.—*Cocaes, Oct.* 12.—Since the 2d inst. the ground has become more favourable for getting through at Hamilton's stope, and at the lower part of the excavation there is now a layer of soft jacotinga, from which samples have been taken during the week, promising favourably, and which, we hope, will lead to the discovery of some vein.

Produce—Cocaes, 25th Sept. to 3d Oct.				*Mks.*	8	7	4	40
,, ,, 4th Oct. to 13th Oct.					12	3	6	3—21 3 2 43
,, Cuiaba, 26th Sept. to 6th Oct.					1	7	1	13
,, ,, 6th Oct. to 16th Oct.					2	0	1	20—3 7 2 33
Total				*Mks.*	25	2	5	4

ST. JOHN DEL REY MINES.—*Morro Velho, Oct.* 8.—It is quite consoling to witness how rapidly our population has been returning to a more healthy state. In May and June the daily sick list ran from 70 to near 100, averaging about 80 to 85; it has fallen during the past week to 33 and 48, averaging 40; but during the last two months it has nearly disappeared, for while the cases of pneumonia and pleuromonia were 16 in June, and 24 in July, they fell off in August to four, and in September to only two—this in itself is sufficient answer to the pseudo-humanity of those persons who presume to say that the operating cause of the great sickness and mortality, which undoubtedly reigned amongst our blacks up to June last, arose from their being overworked. Since that time, though the labour imposed on them continues exactly the same as before, the amount of sickness, and consequent mortality, is fast subsiding to reasonable limits, not being now more than one-half it had been; while pneumonia, the most fatal of all our disorders, has almost wholly disappeared for the present. I have the satisfaction to inform you, that our working force has been latterly increased by the influx of Brazilian borers (which, as I have already informed you, I am doing all I can to encourage), as likewise by the restoration to health and strength of so many of our blacks, who are once more doing good service in the mines—so that the number of borers, which in June and July averaged only 216 and 217, has in the first few days of October averaged 242.

Produce for September—23,629½ oits.—297 lbs. troy—viz.: 23,603 oits., from 6296 tons (according to the returns from the reduction department)—4·45 oits. per ton; 26½ oits. tribute from Felxos—total, 23,629½ oits. This is the largest produce we have ever yet obtained, and I doubt not will be satisfactory to the board.

The stamps for working during the month average 94·33 heads. Had it not been for our prudent arrangements, and for the hearty manner in which our mechanics bestirred themselves when the millier of the Powles stamps gave way, the stoppage, and consequent loss of produce, would, of course, have been heavier.

The supply of stone during the month has been ample for our consumption, not only without deriving assistance from the refuse heap, but even enabling us to reject a little of the inferior ore, though only to the extent of about 90 tons.

Cost for September.—Rs. 41,167 653 at 25½			£4331 3 7
Produce	23,629½ oits.		
Less duty 5 per cent.	1,181½ ,,		
Nett oits.	22,448	at 7s. 7½d.	8569 19 10
Profit			£4238 16 3

In comparing this profit with that of previous months, you will perceive that it is apparently increased by omitting here to deduct 2 per cent. export duty, which, you are aware, is now paid in money instead of in kind, and which will, consequently, appear under the head of "Charges from Rio," as an increase to the cost, and a deduction from the profit of some future month; but, supposing that the statement had to be made in the old way, it would run thus:—

Cost for September (as above)			£4331 3 7
Produce	23,629½ oits.		
Less duty, 7 per cent.	1,654½ ,,		
Nett oits.	21,975	at 7s. 7½d.	8389 9 1
Profit			£4058 5 6

Now the highest profit, as well as the highest produce, previously attained had been in November, 1848, when the results were, produce, 23,407 oits., and profit, 4002*l*. 13*s*. 6*d*.—whereas we have now 23,629½ oits., and profit 4058*l*. 5*s*. 6*d*., or without deducting, as we now must do, only 5 per cent. duty, 4238*l*. 16*s*. 3*d*. I had hoped, indeed, that there would have appeared a further reduction in cost, and a consequent further addition to the profit of September, and this would have been the case, had it not been for the unfortunate failure of the millier at the Powles stamps, which forced on us an extra expenditure (including the value of a new cog wheel) of about Rs. 1500, still I feel persuaded the results will be highly pleasing to the board. The mines were never in more perfect working order, yet they will be still more so in about twelve months, when the opening out of the branch lode in the north side of the gut will enable us, even without any increase of our present boring force, to break larger quantities of ore in the Bahu Mine, and when the expected completion of the two inclined planes will enable us to haul up such increased quantities of stone, which our present hauling power could not possibly effect.

Oct. 18.—Gold extracted to date, 7784 oits., from 411·86 cubic feet of sand (result of ten days' stamping)=18 9-10ths oits. per cubic foot. The stamps working 17 days averaged 94 7-10ths heads.

Supply of Stone.—I have much satisfaction in repeating that the supply of stone is kept up with great spirit; so much so, that not only have we no further assistance from the refuse heap, but since the 24th of last month we have every day been enabled to reject a few loads of the inferior stone.

UNITED MEXICAN MINES.—*Guanaruato, November* 9.

MINE OF RAYAS.—The court will learn by the report of Mr. Parkman, herewith transmitted in detail, that the improvement in the end and new pit of Santo Toribio, and in those of San Crescencio, specially alluded to in my last letter, continues without any variation, further than a fair prospect of further extension in all of four points, inasmuch as the breadth of vein is increasing, whilst its quality continues the same. The other productive workings have not shown any new feature: the general yield of picked ores, however, has given an increase of 200 cargas in the five weeks, ended the 3d inst., as compared with the like term, ending the 29th September. On the other hand, the sales by the mine and by buscones have fallen off together to some extent, but will be more than compensated by the increased quantity and quality of the picked ores under process of reduction.

MINE OF ALDANA.—The occasional interruption by water, &c., in the shaft having been completely removed, the sinking therein has been more regular, and reached 12½ varas in five weeks, making the entire depth of 86½ varas on the 3d inst., leaving, therefore, about 53 varas to cut the vein in that locality.

MINE OF PROMONTORIO.—No essential change is observable in the workings, though their produce has been less, both in quality and quantity, than in the preceding month, which is, however, only attributable to the common mutations of the vein.

Remittances.—By the usual conducta at the end of the year I purpose to transmit a further sum to the agents at Tampico for shipment to the directors, but cannot at present name the probable amount.—J. N. SHOOLBRED.

NOTE.—A remittance of $20,000 and 1000 doubloons has been received by this packet.—J. MATHER, Secretary.

The following is the Report on the State of the Workings in the Mines of Rayas, Aldana, Promontorio, and Jesus Maria y Jose:—

MINE OF RAYAS.—Regarding the works of buscones, we have only to repeat what was said last month, that they present no change worthy of remark.

Crucero of Santo Toribio.—This work has advanced but 200 varas in very hard and poor vein; it has been persisted in, with a view to the immense advantage that would accrue from the discovery of a body of ore in this portion of the mine.

Frente of Santo Toribio.—During the month this work has advanced 5·46 varas. The improvement mentioned last month continues, and appears to extend to a "pozo" opened near the end.

Workings in Ore.—Regarding the Contra Cielo there is no material change to be remarked. The ore continues good, and the extraction most arduous from the want of ventilation. The only available remedy for this evil is a communication with the workings of the Promontorio. As this would be advantageous to both mines, a work has been commenced in the last week with that object, and being likewise a speculation on the intermediate space. In the pozo of Santo Toribio we have commenced taking out the water, and shall, we hope, be enabled to resume work there within two or three weeks. San Crecencio frente and pozo, on the north-west side of Santo Toribio, and near the bottom of the same, continues a very promising labor. These works have employed the nominal number of 54 barmen, which has, however, rarely been made up at night. The ore remitted to the haciendas in five weeks amounts to 3600 cargas.

MINE OF ALDANA.—In the shaft of this mine the change of workmen mentioned last month was made. In five weeks they have sunk 12·75 varas, making a total depth of 96·75 varas. In the pozo of Santo Toribio, in the meantime, 10·68 varas have been driven, without any change worth mention.

MINE OF PROMONTORIO.—The level of Santa Catalina has advanced 5·15 varas in hard and poor vein. A change has been made in the direction, in the hopes of getting into better ground: one of the pozos in this level has latterly improved. The pozo of San Feliciano is being driven, with the view of effecting a communication with the workings of Rayas, for mutual ventilation. The work is at present giving fair ore, and, I think, may be expected to improve.

MINE OF JESUS MARIA.—In this mine the necessary exterior works are advancing to a conclusion. The malacate and roof for same will be concluded in two weeks. We may then be enabled to go on sinking the shaft, and limit the expense entirely to that object.

S. P. PARKMAN.

MILWR LEAD MINES.—We have received the following return of the produce of these mines for the quarter ending December 31:—

	Tons.	Price.	Amount.
October (tickotting)	60	£11 9 0	£687 0 0
,, (private)	25	11 9 0	286 5 0
November (ticketing)	50	11 17 6	593 15 0
December ,,	50	12 6 0	615 0 0
Tons	185		£2182 0 0

DEVON AND COURTENAY.—The following is a statement of the quantity of ores sold, and prices realised, since the 5th October last:—

1849—Oct. 5	*Tons* 15 2 2 0	£	85 18 4
Nov. 10	18 1 3 0		165 9 3
Dec. 8	21 19 1 0		160 0 0
Total	*Tons* 55 3 2 0	£	411 7 7

Which sum is more than sufficient to pay the cost of working the mine for three months; and in a few days it is expected there will be 20 tons more to sample.

A FEW HINTS TO MINING SHAREDEALERS.

SIR,—It is a pleasing sight to look over your Journal, and observe you holding out to the mining community that the price of most metals are either advanced or likely to do so. It is also cheering to all parties when the miner reaps a good harvest—the merchant, the artisan, and the agriculturist, all come in for a share with him; and when it shows an improving aspect, many are led to join in mining speculations, which, however, end like most other matters—some meeting with prizes and others blanks. But it should be borne in mind, that mining speculations are not so liable to be ruinous to an individual as many other speculations, from their rarely being carried out single handed. Most mines are worked in shares, and these shares so divided as to allow one person to take such number as he can carry on, without seriously injuring himself if it should turn out an unproductive concern. It is those who take a large number of shares in one mine, and that mine turning out a bad one, who injure themselves; if they were to take as many shares in mines as they could carry on without injuring themselves, and these shares divided over from 4 to 10 mines, they would then have a far better chance, and also see the system of management adopted in each mine, which would enable them to detect those that were running wild, and leaving but little chance for remunerating returns. Were these mines held in check, it is my firm belief that many which now turn out ruinous speculations would have been dividend-paying mines, and the features of mining speculation so altered as to assume a cheering countenance, that would tempt most speculating men.

I very much approve of your plan of inserting reports in your Journal as to the prospects and expenditures of all those mines that forward you their returns; and it is a matter of serious regret that the plan is not generally adopted, as I see many that are dividend-paying mines hang back from publishing general monthly reports, but are not backward in finding a way to get any improvement in a shaft, level, or winze, that will cause an advance in the price of shares, to find its way into your columns. Many of these mineowners look more to share jobbing than the real dividend, and dare not give a monthly report, as they are aware that this would be letting them open to the scrutinising eye of all the labouring miners in the mine, whom many of them they know are as keen as themselves.

I think but few practical miners, let their circumstances be ever so affluent, are known to purchase shares in what are termed rich mines, with a view of keeping them—there being but few of these mines, let their riches be what they may, which ever pay the principal and interest for high purchases. Speculating men in mines should purchase in shallow promising mines, at low rates; and let those that have good mines keep them and work them, which they are sure to do if they were not aware of the price being above the real prospects.

I noticed in your Journal of the 15th inst. a favourable report of Wheal Golden Mine. I was not aware of its being again set to work, and it was pleasing to find some of the men of old still living, and willing to give a brief outline of what those men did. In the beginning of June, 1829, I was requested by the then proprietors of the Wheal Golden Mine to go there and examine, and report as to is future prospects. Agreeable to this request, I went to the mine, which I found worked 57 fathoms under the adit, with only one shaft; the mines were badly ventilated. A new shaft was sinking, called "Bartlett's Shaft," which was never sunk through by that party. I found the lode what is generally termed a small one, with a shoot of ore ground about the engine-shaft, from 40 to 60 fathoms in length; nearly all this ground was worked away—the lode had been partially worked in some of the levels as far north as Bartlett's shaft. I think your correspondent was misinformed if a stranger, or forgot himself if one of the men of old, when he says that the shaft had not been sunk for five years previous to its stopping, as I found little or none of the lode in the back of the 57 fathom level worked away. I found no plan, or section, kept on the mine, and had to make them, by which I now find that I let the pitch in the 57 fathom level, south of the shaft, at 1*l*. per ton, and the north one at 1*l*. 10*s*.; it is not likely they left these backs standing for five years.

I also find I remarked on the section as to what I set every pitch for in the upper level, which averaged from 3*l*. to 4*l*. per ton—the company paying dressing charges; the pitches were near all taken below what I considered a remunerating price, in consequence of the company allowing the men to draw high subsist. I went there for two or three months, and let all the work, when the company, in consequence of a miscalculation as to the depth that the lode would be cut in Bartlett's, came to the conclusion of taking out all they could, and abandon the mine, which I think took them a few months. Its being coupled with East Wheals Rose, as to strata and nature of the lode, might as well have been left out of the question, as every practical miner must know that it is not unlikely that there are 50 changes of strata between this and Wheal Rose, neither does any practical man who has seen this district need any one to tell him that North and South Wheal Golden and Penhale is all in a very favourable lead strata; a single glance at it will convince most men that they need no Wheal Rose on that point; and I beg to throw out a few hints as to my views on these mines, by remarking that I am not an advocate for working deep mines, and more particularly lead mines, and would ask, how many could be pointed out in Devon and Cornwall that have paid expenses after they are 100 fathoms under the sea level, supposing them to be then dependent on what they got below that level, I think very few will be found; but no difficulty would be found in pointing out a great number of paying mines above that level. This mine being now sunk down to the 70 fm. level, and knowing as I do, and their agents must also be aware of it, that there is a quantity of untried ground intersected with cross-courses standing between South Wheal Golden and Penhale, as also between South and North Wheals Golden I venture to suggest that the mine should be ventilated, and the 60 fathom and 70 fathom levels extended through all this high ground, opening new backs, and the other mines unwatered; then I think there would be a far better chance of remunerating the shareholders than there will by continuing to sink South Wheal Golden. If the latter plan be persevered in, I venture to predict them very fortunate shareholders if they see a new penny for an old one. The reader may not be aware that Penhale was a very productive mine, and much better to be coupled with Wheal Golden than East Wheal Rose, as it is on the same lode, and in the same strata, within a very short distance, and is a very favourable strata for lead.—N. ENSOR: *Washford, Taunton, Dec.* 24.

CAMERON'S COALBROOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.

A special general meeting of shareholders was held at the offices, Moorgate-street, on Thursday last, the 27th instant.

E. G. WINTHROP, Esq., in the chair.

Mr. HOWDEN (the secretary) having read the notice convening the meeting, the CHAIRMAN said, it was almost necessary to apologise for calling them together so soon after the last meeting; but, as it was compulsory under their deed that the resolutions then passed should be confirmed at a subsequent meeting, they had no alternative. They had now met to confirm the resolution for making the call of 2*l*. per share payable on the 6th March, 1850, and to re-resolve on the formation of the railway.

Previous to the resolution in confirmation of the call being made was put, Mr. SMALLBONE explained, that he knew many shareholders entertained the idea that they were making a 2*l*. call in addition to the last call of 1*l*. per share, which was not the fact; the call was for 2*l*., but whoever had paid the last 1*l*. per share, would have but 1*l*. to pay in the present instance.—The resolution was then confirmed unanimously.

The resolution for making the railway was then read, when Mr. HALLETT said, he should be happy to put the resolution, but should be glad to know, if they set about making the line, how they were to pay for it?

The CHAIRMAN said, there was the present call, which would be something towards it, and they had about 4000 shares, which they might issue as preference shares; or they could borrow. The directors had well considered the subject in all its bearings, and were satisfied there was no particular difficulty; two different contractors had agreed to complete the line in three months—the company to pay 33 per cent. of the cost as the works proceeded, and the remainder, in one case, in 12 months, in the other, 18 months, from the commencement; it would be 2¾ miles in length, and its cost only 4500*l*.

Mr. ELDERTON said, he had had, within the last three days, an interview with another contractor, who offered still more advantageous terms.

The CHAIRMAN continued, he felt satisfied they had committed a preposterous error in commencing operations at all until they had completed the railway; that was now their only salvation; and he had no doubt that, from the day after its completion, when coals would be on their route to the shipping place, that a material change would be seen in their position and prospects, and the real value of the property be developed.—The resolution for making the railway and branches was then unanimously confirmed.

Mr. ELDERTON said, he had had, since the last meeting, an interview with Mr. Hooper, the solicitor to the Duke of Beaufort; and he was happy to say he believed they should come to an arrangement in passing over his Grace's land, most advantageous to the company.

A vote of thanks was then passed to the chairman, who, in reply, said that at the general meeting in July, he hoped he should have some information to give them of a highly satisfactory nature, and, in the meantime, he trusted all those who could would immediately respond to the call, or, at all events, by the time it was due. This would enable the directors to take advantage of circumstances, and he had not the slightest doubt but that the results would be most gratifying.

WHEAL BLENCOWE MINING COMPANY.

A general meeting was held on the 18th inst., when a statement of accounts was presented, showing balance of 110*l*. 16*s*. 11*d*. against the mine. A call of 10*s*. per share was made. Since the last general meeting, the adventurers have received information of the discovery of some promising lodes, running north of those recently worked upon, and it was, consequently, resolved that the resolution then passed for selling the materials and winding up the mine be rescinded, and that the 15 fm. level be driven as recommended by the captain. Capt. Webb was appointed to value the materials between those relinquishing their shares and the other adventurers. Accompanying the statement of accounts, the purser has issued the following report:—

Dec. 10.—The appointment of Capt. Webb to value the materials was fully approved of by such of the adventurers at the meeting as intend to relinquish their shares; and as such valuation will be proceeded with immediately, it is requested that any adventurer intending to relinquish, but has not yet sent a written notice of such intention to the purser, will do so before the 30th inst., in order that such person may avoid all liabilities beyond those already incurred, for which the adventurers are at present answerable. I think it right to state, for the information of those adventurers who did not attend the meeting, that there are certain liabilities, the amount of which cannot at present be ascertained, as the negociations for reducing them to the lowest possible amount are still pending; but every effort shall be made to bring them to a close, that retiring shareholders may be released from their responsibilities at the earliest period possible. A remittance for the amount due upon each share is requested to be paid immediately.

CRADDOCK MOOR MINING COMPANY.

At the two-monthly meeting of adventurers, held at Liskeard, on the 21st inst., the accounts were examined and passed, showing—Calls, 105*l*. 10*s*.; balance last account, 23*l*. 5*s*. 1*d*.=128*l*. 15*s*. 1*d*.; by labour cost, September and October, 38*l*. 12*s*.; materials, 8*l*. 15*s*.; leaving balance in favour of adventurers, 81*l*. 8*s*. 1*d*. A call of 10*s*. per share was made, and the following report, from Captain H. Taylor, was read to the meeting:—

The cross-course in the 70 fm. level in West Caradon has been driven on 4 fms. north towards Craddock Moor sett, and was found as well defined, and its walls as regular, as we have it in Craddock Moor; but for want of better ventilation, it would be difficult to continue this driving; and I thought it best to sink the shaft at once, as by so doing we shall come at the object sooner, and prove it more effectually. We could not think of moving the engine now in the winter, and, therefore, have stripped the south shaft, and fixed rods and stands from the engine to the new shaft. We have also put the lift in the shaft, and divided and cased it down; and have commenced sinking at 10*l*. 10*s*. per fm.

GONAMENA MINING COMPANY.

At the two-monthly meeting of adventurers, held at Liskeard, on the 21st inst., the accounts were examined and passed, showing—Balance last account 287*l*. 0*s*. 1*d*.; by labour cost, September and October, 119*l*. 1*s*. 7*d*.; merchants' bills, 18*l*. 17*s*. 5*d*.; leaving balance in favour of adventurers, 149*l*. 1*s*. 1*d*. The following report, from Captain John Buzza, was read:—

Taylor's lode, in the 17 fm. level, is 12 inches wide, producing half a ton per fm. In the 39 fm. level, on Taylor's lode, the men are rising, to meet a winze now sinking in the bottom of the 17. The 60 fm. level on Gilpin's lode, was poor when the men left it; they have lately been stoping the back, where they have broken about 30 tons of ore; they will commence driving the end again in a few days. The 80 cross-cut north is driven 30 fms. from Dunstan's lode towards Gilpin's lode: we hope to cut the lode in this level in two months.

LAMHEROOE WHEAL MARIA MINING COMPANY.

A general meeting of shareholders was held at the offices, King-street, on Thursday, the 27th instant.

GEORGE EDWARDS, Esq. in the chair.

After the usual preliminary business, the SECRETARY read the following report from Mr. Adam Murray, jun., on the mine, and the district generally:—

"These mines are situate about one mile and a half west of the Devon Great Consols, and in the same important channel of country. They are bounded on the south by the granite of Heigniston Down and Kitt Hill and the Callington Mines, and towards the north and west by property only slightly explored for minerals, and nearly surrounded by the Tamar river. The great feature of this district, that which has rendered it so important, is the Great Wheal Maria lode, which takes its course through the centre of this sett, under similar conditions as in Great Devon Consols. On tracing this great lode after its heave of nearly 100 fms. in the Great Devon Consols, it appears to be almost obliterated in its western course on entering the Wheal Fortescue sett, but this is due to the intervention of a course of metamorphosed schists, or a compact talcose clay-slate, interstratified with volcanic ash, commencing at this point to overlay the argillaceous rocks below, where the lode will, most probably, be found unaltered, and of its original value. The Wheal Fortescue adventurers are proceeding to ascertain this fact by sinking through this hard rock at Capel Tor. Some other endeavours were made at Wheal Williams, where the lode crosses to the south side of the Tamar, but without success; for the shafts, when the mine was abandoned, were evidently not sunk deep enough to pierce the overlapping hard stratification. As no other endeavours have been made, or brought to a fair issue, the fact of the Great Wheal Maria lode existing in a rich state to the west of Great Devon Consols can only rest on probability at present. This probability is certainly very much in favour of Lamheroce sett, on this account, that the stratification cut in the lower part of the shafts is of indentically the same channel—soft argillaceous felspathic schists—as the metalliferous strata of Devon Consols, and intersected by similar cross-courses heaving its lodes."

Mr. Murray then enters into a particular description of the 11 lodes of copper and tin contained in the Lamheroce Mine, and thus concludes—"In reviewing the position and workings on these 11 lodes, the probabilities are not in favour of immediate results in the mine, though the prospects are good. The great work has been done, so far, in getting the shafts down beneath the influence of the super-strata, but the work would have been much better accomplished if one of these shafts had been sunk further northward, so as to have commanded the Wheal Maria lode, instead of being 51 fms. to the south of it, whilst the lode underlays northward, making a cross-cut at the 60 fm. level, equal to 70 or 80 fathoms. The working at Davey's shaft may be more speedy in making returns by cutting the lodes Nos. 9, 10, and 11, and driving on them. But with the present monthly cost of the engine and pumps, amounting to 108*l*. with the items for agency, &c., attendant on the establishment, making a permanent cost of 127*l*. per month, it would be advisable under such circumstances to work these underground levels as expeditiously as possible. Therefore, at the engine-shaft, six men might be employed in cross-cutting north, and six men exploring the lode cut, and in Davey's the same number of men might be most judiciously employed cross-cutting both north and south. This addition of 24 tutwork men to the permanent cost of 127*l*. monthly would add 76*l*., which with 18*l*. for candles, powder, iron, steel, safety, &c., would amount in all to 215*l*. per month. The No. 6 lode at the engine-shaft, and lodes Nos. 9 and 10 at Davey's, may produce results speedily, to partly cover the cost, and the cross-course, as yet very little seen, may be very productive in lead, but the important feature in the mine—Wheal Maria lode—cannot be intersected at the 60 fm. in less than 16 months."

The accounts submitted showed the liabilities to be, including November cost (240*l*. 12*s*. 5*d*.), 731*l*. 16*s*. 3*d*.; assets, 650*l*. 12*s*. 2*d*.: leaving balance against the mine, 81*l*. 4*s*. 1*d*.—A call of 2*l*. per share was made, payable by instalments—10*s*. on or before the 10th January next, and the remaining 30*s*. per share in three equal payments of 10*s*. every four months. Sundry resolutions were then passed, for which see our advertising columns.

WEST CARADON MINING COMPANY.

At the two-monthly meeting of adventurers, held at Liskeard on the 21st inst., the accounts were examined and passed, showing—Ores sold 18th Oct., 255*5l*. 3*s*. 9*d*.; carriage paid by purchasers, 71*l*. 16*s*. 10*d*.; ores sold 22d Nov., 2392*l*. 0*s*. 9*d*.; carriage, 80*l*. 1*s*.; materials sold, 26*l*. 12*s*. 11*d*.; dividend on Liskeard and Caradon Railway shares, 31*l*. 5*s*.=4819*l*. 14*s*. 6*d*.—By labour cost, 3259*l*. 15*s*. 7*d*.; merchants' bills, 804*l*. 14*s*. 5*d*.; law expenses, 50*l*.; leaving a profit of 705*l*. 4*s*. 6*d*.; to which add balance last account, 1200*l*. 13*s*. 10*d*. =1904*l*. 18*s*. 4*d*., from which deduct dividend, 50*s*. per share, 640*l*., leaves balance in favour of adventurers, 1265*l*. 18*s*. 4*d*.

WHEAL TREHANE MINING COMPANY.

The bi-monthly account meeting was held on the 19th inst., when a balance of 1060*l*. 14*s*. 2*d*. was found in favour of the company, and a dividend of 30*s*. per share was declared. The statement of accounts for July and Aug. showed—Balance in hand, 1020*l*. 17*s*. 7*d*.; silver-lead ore sold to Messrs. Pontifex and and Wood, Oct. 16, 1330*l*. 1*s*.=2350*l*. 18*s*. 7*d*.—Labour cost, 582*l*. 10*s*. 8*d*.; materials, 167*l*. 13*s*. 9*d*.; Trelawney adventurers, for use of engine and water, 55*l*.; dividend declared 15th Oct., 384*l*.; lords' dues on ore sold 16th Oct., 86*l*. 14*s*.; E. H. Pedler, for lease of further grant, 14*l*. 6*s*.—leaving balance in favour of adventurers, 1060*l*. 14*s*. 2*d*.—The following report was presented to the meeting:—

Dec. 19.—Kelly's shaft is sunk 10 fms. 2 ft. below the 68 fm. level, and a 78 fm. crosscut driven 4 ft. towards the lode in moderate ground; we shall intersect the lode here in a few days, if the ground continues as at present. In the 68 fm. level south the lode has produced, on an average, in the last 6 fms. driving, about 1 ton of lead per fm.; the ground passed through has been hard, but in the present end it is easier, and the lode is worth 18*l*. per fm.; the lode in the stopes in the back of this level, both north and south of the rise, is producing 12 cwts. of lead per fm. In the north end, in this level, the lode is 3 ft. wide, and worth 8*l*. per fm., ground easy for driving; the last 8 fms. has produced 7 cwts. of lead per fm. In the stopes in the back of the 62 fm. level the lode is worth 15*l*. per fm. The lode in the stopes in the back of the 55 fm. level is producing 8 cwts. of lead per fm. The stopes in the back of the 45, and bottom of the 35 fm. levels are producing 7 cwts. per fm. The ground in the cross-cut, driving west in the 30 fm. level, is favourable for driving, and letting out a little more water. We sampled, on Friday last, a parcel of rich ore, computed 58 tons, to be sold on Saturday next. The engine-house is in order to receive the engine, and some parts of it are on the mine.

PLYMOUTH WHEAL YEOLAND.—A parcel of tin has just been sold, weighing 4 tons 14 cwts. 2 qrs. 27 lbs., producing 208*l*. 12*s*. 5*d*.—4 tons 9 cwts. of which realised the price of 44*l*. 10*s*. per ton.

SOUTH WHEAL BASSET.—We stated in our City Article, last week, that the new 60-in. cylinder engine was to be erected in this part of the Wheal Basset property. This was an error; the 40-in. cylinder engine, in the eastern part of the sett, not being sufficient for the work, the 60-in. engine will be placed there; and, when required, the 40-in. will be removed to the south.

VIRTUOUS LADY AND BEDFORD.—We noticed, some months since, that these mines were put to work again, but have heard nothing of them from that period. This has arisen, we find, from the circumstance of their being at present worked by a single adventurer, who, having succeeded in getting fresh setts for 21 years, at 1-15th dues, has, in the last two or three months, prosecuted the workings, and his spirited exertions are likely to be amply rewarded. These mines are of very novel character, and have often excited the curiosity of the naturalist and miner, hundreds of whom have yearly gone to visit them. Although the deepest level is only 24 fathoms, it is well known these mines were worked upwards of 150 years ago, and when they were commenced is unknown. Immense riches have been produced from them; the late Capt. Williams, who held a large interest in the late company, realised a large fortune in a few years; and there are now caverns extending hundreds of fathoms in length, and many fathoms in width and height, from whence solid masses of ore have been extracted by the men of old. The late company were very successful in their operations till almost eight years since, when they lost the lode, and the endeavours of the late Capt. Williams, to the period of his death, were not only unsuccessful in again discovering it, but for six years preceeding his death no ores were sold. The present adventurer has been more fortunate; in driving a crosscut from the 24 fm. level, they have intersected a lode of immense size, with every appearance of being as extensive as any that have yet been known there, from which about 50 tons of copper ore were sold about two months since, 54 tons more to Messrs. Vivian last week, and another 50 will be ready for sale in the second week in Jan. The first lot produced 5¾, the second 6¾, and the next is expected to produce about 8 per cent. So that the lode continues to improve in richness, and as several sets of tributers have been set to work in other parts of the mine, large returns are expected in the ensuing year. These mines are situated about two miles from Tavistock, and about three from Great Wh. Maria.

PROGRESS OF MINING DURING THE PAST YEAR.

BY J. Y. WATSON, ESQ., F.G.S.

The price of metals, the impulse given to trade, the abundance of money, and the few means of obtaining a fair rate of interest, have all combined to render the past, one of the most extraordinary years in the annals of mining, whether we regard it in relation to the amount of dividends paid by the mines, the general rise in the prices of shares, or in the large increase of business transacted. Perhaps, with respect to the increase of business, nothing has more tended to turn public attention to the mining industry of Cornwall than the *exposés* of railway mismanagement, and the consequent feeling of alarm and distrust towards both shares and debentures, in even the best conducted lines. "It is an ill wind (the proverb says) that blows nobody good," and the miners may rejoice, at least, that public attention, and what is of more importance, public confidence, is daily becoming greater towards mining securities. And, with Consols at 96, money a drug in the market, and scarcely 5 per cent. to be otherwise obtained, we anticipate that mines will ere long become of even more importance with capitalists. Let us hope then, that, as public confidence becomes stronger, so will also the determination of managers and all concerned, to keep mining free from the abuses that formerly existed—free from mismanagement, and free from the gambling speculation too often attendant upon success, and which, profitable for a time, is sure to end in disappointment and loss, even to projectors.

In noticing our review of the year 1846, we remember the *Times* stated that mining "fascinated more than it deterred." This, to an extent, was true, as dabbling in mines was considered formerly as identical with gambling; but, that it has been reduced to a science, and almost to a certainty, the following list of dividends must decide. Look at the list of paid-up capital, then at the price, and the profits divided, and let the candid reader ask if the general press, which so boldly places before the public railway and other questionable schemes, have not been behind the age in scarcely deigning to notice the means that bring to light the hidden resources of our country, and give employment and support, directly and indirectly, to nearly 100,000 individuals in Cornwall alone?

We want only "*facts*" to be supported; we court inquiry; we ask for investigation; the accounts of every mine, made up bi-monthly, are open to the inspection of all concerned, and there can be no "cooking" in legitimate undertakings; and to such alone do we refer.

To understand fully the importance of the following list, the non-mining reader must be told that the average cost or expense of working the mines is about 12,000*l.* per year each mine; many cost 3000*l.* and 4000*l. per month* each. The returns, therefore, in metal, to meet these expenses, and pay these great profits, may be supposed to be very large. The greatest item of cost is, of course, labour—many of the mines employing from 500 to 1000, and even 1500 persons; these are paid every month (having, during that time, money advances made to them called "subsist," if they require it). The bills for materials used, such as gunpowder, coals, iron, timber, candles, &c.—amounting, in the smallest mine, to some hundreds per month—are paid up every *two months*, when the shareholders are called together to examine the accounts, see the vouchers of payment, and divide the profits. This is the grand feature of the Cost-book System; and where it is strictly acted up to, there can be no danger of any liability.

LIST OF DIVIDENDS PAID IN CORNWALL AND DEVON MINES,

IN TWELVE MONTHS, ENDING DEC. 31, 1849.

Mines.	Amount.	Div. per share.	Paid-up.	Price.
Devon Great Consols	£34,304	£33 10 0	£ 1	£190
Par Consols	19,200	150 0 0	500	800
East Wheal Rose	17,920	140 0 0	50	625
Carn Brea	15,000	15 0 0	15	110
*North Pool	11,750	117 10 0	45	500
South Frances	7,192	58 0 0	160	300
Levant	6,720	42 0 0	—	170
South Basset	6,400	50 0 0	—	450
Tamar Consols	5,760	0 12 0	3	8
Wheal Margaret	4,368	39 0 0	—	210
Great Polgooth	3,504	21 10 0	150	300
Wheal Friendship	3,840	30 0 0	—	—
West Caradon	3,840	15 0 0	20	100
Wheal Trelawny	3,640	14 0 0	—	85
Treviskey	3,120	26 0 0	130	140
Bedford United	3,000	0 15 0	2½	4½
Great Work (Tin)	2,677½	22 10 0	—	—
Trehane	2,688	10 10 0	1	31
West Buller	2,560	20 0 0	10	380
West Providence	2,048	8 0 0	1	30
Tincroft	2,100	0 7 0	7	12
Providence Mines	3,640	32 10 0	—	—
Balleswidden	2,760	1 14 0	—	—
United Mines	2,000	10 0 0	—	—
Comfort	1,654	13 0 0	—	90
North Roskear	1,120	8 0 0	10	300
Wheal Seton	1,584	8 0 0	75	280
Stray Park	1,000	1 0 0	40	22
Great Consols	960	10 0 0	1000	220
Wheal Wellington	896	3 10 0	—	—
*Condurrow	768	3 0 0	—	90
Boscaswell	800	12 10 0	—	—
Spearne Consols	656	5 2 6	—	—
Wheal Mary Ann	640	1 5 0	—	33
South Caradon	640	5 0 0	5	400
Wheal Tremayne	512	0 10 0	9½	5½
East Crofty	470	5 0 0	—	65
St. Ives Consols	470	5 0 0	—	—
Wheal Franco	388	1 0 0	—	—
Total dividend paid on 38 mines		£184,589 10		

PAID ON WELSH AND OTHER MINES, DURING THE SAME PERIOD.

Lisburne	£6000	£60 per share.
Goginan	4000	40 "
Total	£10,000	

IRISH MINE.

Wicklow Copper ..... £2750 .... 10s. per share—£5 paid—£8 price.

FOREIGN MINES.

Cobre Copper	£48,000	0	0
St. John del Rey	29,000	0	0
United Mexican	4,940	5	0
Total	£81,940	5	0

MAKING A GRAND TOTAL OF

Cornwall and Devon	£184,589	10	0
Foreign	81,940	5	0
Welsh	10,000	0	0
Irish	2,750	0	0
Grand total	£279,280	2	0

Other mines (chiefly private speculations) have paid dividends; but those given in the above table are mines in which shares are held by the general public.

To show the increased rate of dividends, we would remark that they amounted—

In the year ending	Dec. 31, 1846, to	£ 158,838	0	0	in 28 mines.
Ditto	Dec. 31, 1847, to	155,381	0	0	in 30 mines.
Ditto	Dec. 31, 1848, to	129,024	0	0	in 22 mines.
Ditto	Dec. 31, 1849, to	181,589	10	0	in 38 mines.

The new mines in the present list, which have commenced dividends during the year, are Wheal Mary Ann, Condurrow, Polgooth, West Buller, Comfort, Wheal Tremayne, and Wheal Wellington; and from the position they have assumed, we anticipate much larger dividends from them in 1850. West Buller has been the great gun of the year. This time twelvemonth the mine was barely set to work, and upon an original outlay of 10*l.* per share, 20*l.* per share have been returned to the shareholders, and the value of shares advanced to 380*l.* each! In 1847, it will be remembered, North Pool, in the same vicinity, rose from 50*l.* to 500*l.* per share.

Among other mines in the list, the greatest rises have taken place in South Basset—from 250*l.* to 420*l.* per share; South Frances, 200*l.* to 300*l.*; Treviskey, 90*l.* to 140*l.*; Condurrow, 50*l.* to 90*l.*

South Tolgus shares have advanced from 50*l.* to 100*l.* (the mine adjoins North Pool), and South Tamar shares from 16*s.* to 45*s.* (9000ths) These are among the speculations we expect to see in the dividend list of next year; but these, with others, having been so lately described in the Journal, it would be useless to enter into detail here.

In Wales, numerous mines have been started, particularly in the neighbourhood of Lisburne and Goginan, in Cardiganshire; of these, Llwynmalees, Esgair Llee, Cwm Erfin, Nantyceris, Brin-Arian, and Bodcall, are the most generally known, and have fair prospects.

In Scotland, the Black Craig Mine has been put to work, and is already returning good quantities of ore; whilst at Cairnsmore (Kirkcudbrightshire Mining Company), the returns of lead, 40 tons per month, are more than meeting cost; and after many ups and downs, this mine at last bids fair to remunerate the proprietors.

Of Australian mines, the Burra Burra is the only one yet paying dividends. Of those started by English companies, although some are returning ore, none have as yet become remunerative, though it is to be hoped they will ere long. A large outlay has been made in the Australian Company's mines, and Reedy Creek holds out hopes of profit. In Barossa Range, two mines belonging to this company—the Bremer, and Lyndoch Valley, are yielding rich ores; and as the cost is small, the prospects are very favourable.

Of Californin we have but little to say. We believe just half we hear, and if that half be true, the price of gold must fall, and the price of other metals rise, and therein we find consolation for "One and All."

MINING IN SOUTH AUSTRALIA.

We have been enabled to procure an accurate statement showing the amount of the produce of the South Australian mines shipped from Port Adelaide during the season 1848-9. From this it appears that the total amount of copper ore so exported was 15,598 tons, of which 13,745 tons were supplied from the Burra Burra Mine alone, and 944 tons from the Kapunda, the small remaining export being the produce of six other mining companies. The total shipments of lead ore during the same period were 300 tons. Taking the copper ore as averaging 20*l.* per ton, and the lead ore at 10*l.*, these shipments would yield in this country 314,960*l.* But perhaps this average may be thought too high; let us then take the copper ore at 16*l.* per ton, and the lead at 8*l.*, and we shall still have as the gross returns of these shipments, spreading over a single year only 250,198*l.* This, it must not be forgotten, is principally the produce of one mine, the Burra Burra. Some idea may thus be formed of the vast amount of wealth contained in the soil of this colony, and requiring only energy and skill for its extraction, to an almost incalculable extent. The large amount of produce obtained from the Burra Burra, is to be ascribed to the extensive deposits of ore found so near the surface of that mine originally, and from which the proprietors have been enabled to work it with so much success. But, judging from the extent and richness of the mineral beds, it is utterly inconceivable that many of the other mines will not eventually, and, perhaps, speedily, turn out highly productive undertakings. That they have not hitherto done so, the Kapunda excepted, is mainly to be attributed to want of capital to work them, and to the petty character of the operations. If the proprietors of the unproductive mines could be induced to amalgamate their interests, and two or three good English companies would concentrate their efforts for a short period upon some of the more promising spots, the results, in all probability, would be favourable beyond the expectations of the most sanguine. But this is, perhaps, more than is at present to be expected, or hoped for. The truth of the matter is, that the present proprietors, so long as they retain the faintest hope of "making a good thing" out of their property, feel reluctant to allow other parties to come in for a share, and so are content to labour on under their great and evident disadvantages. Were this selfish feeling once got over, and British capitalists invited freely, and on liberal terms, to associate with the present holders of shares in the pursuit of one common interest, the probability is that the value of the ores exported yearly from South Australia would be from one and a half to two millions sterling, instead of only 250,000*l.* or 300,000*l.*

New Patents.

SPECIFICATIONS ENROLLED DURING THE PAST WEEK.

THOMAS MERCHANT, Derby, civil engineer; and ROBERT HARLAND, Derby, carriage builder: Certain improvements in the construction of railway carriages.—This invention comprehends.—1. A mode of coupling carriages together.—2. A new drag.—and 3. A new construction of "mercantile carriage."—1. The draw-bar in front of the carriage is connected by two rods to the ends of two cross levers, which are centred on the same pin, while their other ends are connected in a similar manner to the draw-bar at the back of the carriage. The extreme ends of the levers are connected to the buffer-rods, so that supposing a train of carriages linked together, and each with this arrangement applied, the buffers will be in constant contact with one another.—2. The "drag" is supported by a point on the rod, which connects the bearings of the wheels of the carriage.—3. The new "mercantile carriage" consists of an ordinary covered truck, with a portion of the top separated from the rest, and turning upon a pin, so that it may be slid on one side out of the way.

Claims.—1. The coupling of railway carriages and engines together in such manner that the buffers of the one shall be in contact with the buffers of the other.—2. The improved "drag," as described.—3. The improved mode of constructing "mercantile carriages," whereby the moveable part of the covers may be slid out of the way, but always in a horizontal plane.

JAMES NASMYTH, Patricroft, Manchester, engineer: Certain improvements in the method of and apparatus for communicating and regulating the power for driving or working machines employed in manufacturing, dyeing, printing, and finishing textile fabrics. The patentee describes and claims—A method of communicating and regulating the power for driving or working machines employed in manufacturing, dyeing, printing, and finishing textile fabrics, by the application of a distinct or separate steam-engine to each separate machine or set of machines, and placing the handle of the lever of the valve which regulates the admission of steam to the cylinder, in a convenient position near the engine, in order that the workman charged with the superintendence of the machine may at the same time have perfect control over the engine, which communicates the driving power without interfering with the adjacent engines.

In consequence of the Christmas holidays, no designs have been registered, and no English patents sealed this week, up to the time of going to press.—*Mechanics' Mag.*

BISHOPP'S DISC-ENGINE.—Considerable misapprehension exists as to the movement of this engine, recently experimented with in the *Minx* steam-vessel. Many persons imagine it is a rotary engine; but such is not the case. The ball, with a handle attached to one side, describes a similar motion to the shoulder joint in the socket of a person when the hand is giving a sling—a continuous circular motion—previous to discharging its contents. The ball of the 10-horse power engine is 11½ in. in diameter, and the disc 27 in. in diameter. The case in which the ball of the engine works is of a drum shape; and the motion of the disc in the groove it occupies for the admission of the steam is similar to an unbroken wave moving with great velocity from one side of the groove to the other, and bearing so correctly on the parts it touches on either side, as not to be liable to be put out of order.

RAILWAY TRAFFIC RETURNS.

Names of Railways.	Length. 1849	1848	Present actual cost.	Price p. share	Div. 1849	Traffic Returns. 1849	1848
Aberdeen	57	16	1,000,547	11	—	£ 624	£ —
Belfast and Ballymena	37½	37½	514,968	18½	5*	773	346
Birkenhead, Lancashire, & Chesh.	19	15	1,088,804	37	5†	848	710
Bolton, Blackburn, & West Yorksh.	14	—	786,384	6	—	421	283
Bristol and Exeter	85½	75½	2,660,490	55	—	4237	—
Caledonian	160	141	5,149,320	10¼	3	5970	3729
Chester and Holyhead	94½	59½	3,358,217	9¼	4	1454	1372
Dublin and Drogheda	35½	35½	778,565	26¼	—	715	670
Dublin and Kingstown	7½	7½	395,915	—	—	615	661
Dundee, Perth, & Aberdeen Junc.	47½	47½	544,554	13½	6¾	924	875
East Anglian (Lynn to Ely)	91½	55½	1,247,446	1¼	—	725	724
East Lancashire	75½	24	2,628,519	17½	5	2128	564
Eastern Counties and Norfolk	322	295	12,027,069	6¾ 7	—	16605	15748
Eastern Union	78	50½	1,782,703	13	—	1738	1210
Edinburgh and Glasgow	57½	52½	2,923,199	28½	6	2824	3089
Edinburgh and Northern	78	34	2,241,276	10¼	2	—	1667
Glasgow, Paisley, and Ayr	102½	74	2,574,330	47	3	2637	2327
Glasgow, Paisley, & Greenock	23	23	852,846	14½	2	866	811
Gt. Northern & East Lincolnshire	143	—	5,138,756	7½	5†	2707	—
Gt. Southern & Western, Ireland	188½	110½	3,552,589	30½ 31	6†	4103	—
Great Western	230½	206½	11,867,042	58	6¾	17540	—
Lancaster and Carlisle	90	70	1,476,102	49	4½	2843	2015
Lancashire and Yorkshire	220	127½	10,063,862	50½	8¾	10942	11134
Liverpool, Crosby, & Southport	13	—	84,455	4½	—	72	92
London and North Western	478	428	26,251,635	108½	7	46650	45742
London and Blackwall	5½	4	1,299,675	3¼ ¼	1-12	539	573
London, Brighton, & South Coast	170	162½	6,502,600	79	2¾	8311	8680
London and South-Western	221	194	7,874,259	61	6¾	9438	10214
Londonderry and Enniskillen	14½	14½	185,739	16	—	127	117
Manchester, Sheffield, & Lincolnsh.	157½	94½	6,598,260	15	5	4797	3783
Midland Company	483	423½	15,133,779	44¼	5¼	22468	23577
Midland Great Western (Irish)	50	26½	725,332	23	4†	1210	1157
Monklands	36	—	486,245	—	6	—	—
North British	122	83	3,649,055	11½ 11	4½	3248	2395
Scottish Central	45½	—	1,364,228	14¾	7	1089	824
Shrewsbury and Chester	48	23	989,618	13	5	1501	1505
Shropshire Union	30	—	——	3	—	454	—
South Devon	57½	29	1,909,232	5	3	1229	1330
South-Eastern	189½	165½	8,666,007	19	6¼	9158	8139
Taff Vale	38	40	879,110	—	7¼	1575	—
Ulster	36	36	723,829	48¾	—	879	831
Waterford and Limerick	25	—	519,894	—	—	—	—
West Cornwall	13	—	——	—	—	256	243
Whitehaven Junction	12	12	180,879	9¼	3	199	163
York, Newcastle, & Berwick	290½	242½	6,827,849	16¼	7	11605	14155
York and North Midland	269	134	4,983,618	17¼	7	6703	7956

* The amount of dividends declared this week in North Pool and Condurrow have not been received.

LATEST CURRENT PRICES OF METALS,

LONDON, DECEMBER 28, 1849.

ENGLISH IRON. *a* per ton.

Bar, bolt, & square, London	£9 13 6–10 17 6
Nail rods	9 12 6–10 15
Hoops	7 10–7 15
Sheets (single)	9 10–9 15
Bars, at Cardiff & Newport	5 5 0
Refined metal, Wales	5 7 6–5 12 6
Do. anthracite	5 15 0
Pigs in Wales	2 15–4 0
Do. do. forge	2 15–3 5
Do., No. 1, Clyde ... net cash	2 7 6–2 9
Blewitt's Patent Refined Iron for bars, rails, &c., free on board at Newport	5 15 0
Do., do., for tin-plates, boiler plates, &c., ditto	4 10 0
Stirling's Patent 3 in Glasgow	2 15–2 18
Toughened Pigs 3 in Wales	3 10–3 15
Staffordshire bars, at the works	6 10
Pigs, in Staffordshire	2 10–3 0
Rails	5 5
Chairs	4 0 0

FOREIGN IRON. *b*

Swedish	11 0–11 10
CCND	16 5–16 10
PSF	15 0
Gosselet	14 10
Archangel	——

FOREIGN STEEL. *c*

Swedish keg	14 15–15 0
Ditto faggot	15 0–15 5

ENGLISH COPPER. *d*

Sheets, sheathing, & bolts, *p. lb.*	0 0 9½
Tough cake	*per ton* 84 0 0
Tile	£83 0 0
Old copper	*per lb.* 0 0 9½
Yellow Metal Sheathing	0 0

FOREIGN COPPER. *f*

Russian	£80 0–90 0

ENGLISH LEAD. *g*

Pig	*per ton* 16 5–16 10
Sheet	17 5 0
Red lead	16 0 0
White ditto	23 0 0
Patent shot	19 0 0

FOREIGN LEAD. *h*

Spanish, in bond	15 0–15 10
American ditto	——

ENGLISH TIN. *i*

Block	*per cwt.* 3 18 0
Bar	3 19 0
Refined	4 4 0

FOREIGN TIN *k*

Banca, in bond	3 18 0
Straits	3 16–3 17
Peruvian (6 mo 2½ p. ct. dis.)	3 6 0

TIN-PLATES. *l*

IC Coke	*per box* 1 7 0
IC Charcoal	1 14–1 19
IX ditto	1 17 0

SPELTER. *m*

Plates, warehoused	*per ton* 15 10–15 15
Ditto, to arrive	——

ZINC. *n*

English sheet	*per ton* 20 0 0
QUICKSILVER	*per lb.* 3s. 4d.

Terms.—*a*, 6 months, or 2½ per cent. dis.; *b*, ditto; *c*, ditto; *d*, 6 months, or 3 per ct. dis.; *e*, 6 months, or 2½ per cent. dis.; *f*, ditto; *g*, ditto; *h*, ditto; *i*, ditto; *k*, net cash; *l*, 6 months, or 3 p. ct. dis.; *m*, net cash; *n*, 3 months, or 1½ p. c. dis.; *o*, ditto, 1½ dis.

* Cold-blast, free on board in Wales.

GLASGOW.—There has been considerable enquiry for pig iron this week. Several sales of mixed numbers were effected to day at 47*s.*, prompt cash, and 48*s.* three months open. The market closed, buyers at the former price, cash, sellers ask 47*s.* 6*d.*

NEW YORK, Dec. 12.—The last accounts represent the iron market as very firm, especially for Scotch pig, the price of which had advanced $1 per ton from the lowest point. 600 tons had been taken at $20 to $20½ cash, and $21 for six months from ship; 100 tons English bars at $38, six months.

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars	per oz. £3 17 9	New dollars	per oz. £0 4 10
" Portugal pieces	0 0 0	Silver in bars (standard)	0 4 11½

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the last week:—Silver bars to Belgium, 17,800; ditto to Rotterdam, 56,900; ditto to Dunkirk, 135,000—Silver coin to Rotterdam, 14,000.—Making a total of 223,700 ounces of silver.

FOREIGN INTELLIGENCE.

MINING IN FRANCE.—Of late mining enterprise has been gradually on the increase in France, and confidence is once more being established in this description of speculation, which had been so depressed in consequence of political events, and the depreciation of railway undertakings. The demand for iron is gradually improving, and a general activity prevails at St. Dizier, St. Etienne, and the forge districts, as well as in the colliery basins of the Loire, Rive de Gier, Grand' Combe, &c. A commission has been appointed to inquire into the existing mining laws of the country, previous to the subject being brought before the National Assembly, especially those as regards Corsica and Algeria. The working of the mines in Algeria has as yet proved a failure; and although copper and other ores exist to a great extent, either through bad management or other causes, the explorations have been extremely limited, notwithstanding that a great many experienced miners have emigrated to that colony.

MINING IN BELGIUM.—The last accounts from Liege, Charleroi, &c., represent mining adventure as much improving. Several considerable orders have been received for cannon, muskets, pistols, and swords for the Sultan of Turkey and the Pacha of Egypt, which have caused a great activity in the foundries of Verviers, and others well known for this particular manufacture. Various specimens of cannon, muskets, and pistols, on a new principle and improved alloy of metal, have been sent over to the Board of Ordnance in London for the approval of the British Government.

SPAIN—THE QUICKSILVER CONTRACTS.—The *Clasor Publico* of the 20th says, that a royal order has been transmitted to the directors of the Treasury, by which it appears that a new contract has been made with the firms of Baring and Rothschild, of 12,000 quintals of quicksilver, belonging to the products of the forthcoming year, 1850. According to the stipulations of the contract, the Government will deliver to each of these houses an order on the Government official at Seville, who is employed in packing up the quicksilver in the iron bottles. This individual will deliver into the hands of the porters of these orders the 12,000 quintals of mercury, in iron flasks of three arrobas weight each. Each house is to receive equal quantities, and the quicksilver is to be given as fast as it is received from the mines, the Government engaging to give in the whole by the end of June. In exchange for these Government orders, and with reference to other payments in advance by the same firms, the contractors will pay the sum of 50,000*l.* sterling, in letters of exchange upon London, to be applied to the payment of the interest of three per cent. These sums will be reckoned in the account of payments in advance in January, 1850 (payments for quicksilver by the Treasury), at a discount of 5 per cent., and 1 per cent. commission a year.

THE IRON TRADE.—The question of the iron duties is still being discussed in committee. On the 20th instant the debate was exceedingly warm, several protectionists giving vent to their feelings in furious imprecations. The free-traders are getting up petitions to the Chambers to lower the said duties. Cast-iron in ingots pays 53½ per cent. coming in Spanish bottoms, and 64 in foreign ones. Iron, fine metal, from 90 to 108 per cent.; forged-iron, 108 and 129 per cent.; cast and wrought-iron, 264 and 321 per cent.; staple-iron at 89 and 107 per cent. Brass at 53, 58, 64, and 66 per cent. in Spanish bottoms, and at 66, 72, 80, and 88 in foreign ones.

The *Fomento*, of Barcelona, of the 14th, announces that the Company El Veterano, has signed a contract with Messrs. Talabot, of Paris, for the construction of a railway from Barcelona to San Juan de las Abadessas, uniting Barcelona to San Andres, Granollers, Vich Ripal, and the rich mines at San Juan de las Abadessas. M. Perera, acting director of the company, had left for Madrid, to submit the plans, &c., to the Government.

CALIFORNIA.—The steamer, *Crescent City*, arrived at New York on the 7th inst., with accounts of one month's later date—San Francisco, Nov. 1; Panama, 25; and Chagres, 28. She brought from the latter port 160 passengers, and nearly $1,000,000 in gold dust on freight, and about $350,000 worth in passengers' hands. The reports from California are encouraging; the gold was still plentiful, and those who were able to stand the fatigues of digging it got fairly rewarded for their exertions. The health of the people at the mines was generally good; but slight attacks of dysentry prevented many from digging. The average amount of gold dug out by the miners is computed to be about $10 per day. The number of arrivals from Europe and the United States was progressing with much spirit. There were at least 100 British vessels in the harbour of San Francisco on the 1st of November. The town of San Francisco numbered in population at least 30,000, and the number of persons at the mines is confidently set down at 80,000 persons. Her Majesty's frigate, the *Amphitrite*, Capt. Eden, was at Mazatlan. Since the *Crescent City* arrived, the steamer *Ohio* has reached New York, with $250,000 more of gold dust on board, but no later news.

PANAMA.—The railway will, we learn, now be commenced with vigour. Mr. Stevens, the celebrated traveller, one of the directors of the company, has departed for the scene of operations, and will be followed on the 13th inst. by a full corps of engineers and operatives. A large quantity of wheelborrows has already been sent on to Chagres. Everything necessary for the construction of the road, except the cross ties and supports of the rails, will be made ready in New York. As fast as the grade is completed, the rails will be laid, and the road used for its own construction. The Messrs. Howland and Aspinwall have just brought another steamer to ply between this and Chagres in connection with the Cherokee. It is supposed that they intend to extend their operations to the East Indies. Some persons are as sanguine of the success of these new arrangements as to insist that a voyage will yet be made from Liverpool to Canton, *viâ* Panama, in 45 days.

Letters from Palermo of the 15th, mention that a royal decree was about to be published, imposing a duty on the export of sulphur of two taris per cantar. No further particulars had transpired, nor was it known when the duty was to take effect, whether immediately or a month or two hence. The exchange on London was 57¼ for 90 days.

SWEDISH IRON.—The importations of iron from Sweden, during the past year, have been more considerable than usual. Last week, a vessel arrived from Stockholm with the large quantity of 19,491 bars, and another this week with 12,350 bars of iron, of a superior quality, for the casting of steel; both were consigned to order. A great portion of this metal, which has arrived in this country, has been exported to India and the United States of America.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, *Saturday morning Eleven o'clock.*

Bank Stock, 7 per Cent., 202½
3 per Cent. Reduced Ann., 96¾ ¼ ⅛
3 per Cent. Consols Ann., —
3½ per Cent. Ann., 97¼ ⅛ ⅛
Long Annuities, 8¼
India Stock, 10¼ per Cent., —
5 per Cent. Consols for Opt. 96½ ⅛ ⅛
Exchq. Bills, 1000*l.*, 1¼d. 60 69 pm.

Belgian, 4½ per Cent., 88
Dutch, 2½ per Cent., 56 ½
Brazilian, 5 per Cent., 86½
Chilian, 6 per Cent., —
Mexican 5 per Cent., ex Comp., 29¼ ¼ ½
Russian, 5 per Cent., 110½ 9½
Spanish, 5 per Cent. 19 18½
Ditto 3 per Cent., 39½ ½

MINES.—Although the holidays of the present season may have caused an interruption to the general business of the stock and share market, yet we find that the inquiries for shares in our leading mines continue firm and active. The metal market, and the favourable prospects of the mining interest generally, are important adjuncts in the promotion of that support which capitalists have of late manifested by the many investments in this long overlooked section of our national wealth.

On referring to another column will be found our annual report of the "Progress of Mining during the Past Year," showing the profitable results to adventurers in our dividend-paying mines, by which we may reasonably anticipate that the year 1850 will prove a new era in British mining, by receiving that support which British capital can effect when laudably employed in efficiently developing our vast mineral resources at home. The evidence which this "Progress of Mining" affords, clearly represents the superiority in the amount of profits over railways, and many other kinds of investment; whilst the regularity in the division of profit and loss, and payments of dividends (bi-monthly), are among the peculiar and gratifying advantages resulting from the systematic manner of the financial affairs of a mine conducted on the principles of the primitive cost-book.

South Basset, Bedford United, South Tamar, South Tolgus, Mary Ann, &c., continue in demand.

Heignston Down Consols and South Tamar continue to improve, and inquiries are being made for shares at advanced prices.

Cook's Kitchen has also been in request, from the improvements recently made.

Shares in the following mines have changed hands since our last:—Devon Great Consols, East Wheal Rose, Treviskey and Barrier, South Frances, East Tamar, Trelawny, South Tamar, Tregerden, Tincroft, Tamar Consols, East Buller, Heignston Down Consols, West Providence, Fortescue, Cook's Kitchen, Condurrow, Herodsfoot, Stray Park, Trehane, and Holmbush.

At Wheal Trehane bi-monthly account, a dividend of 30*s.* per share was declared for July and August, the balance in hand, after payment of which, amounted to 676*l.* 14*s.* 2*d.*; and a parcel of silver-lead ores, estimated 58 tons, has been sold since the meeting, realised 23*l.* 2*s.* 6*d.* per ton. The mine is progressing in a highly-gratifying manner, the lode in the deepest level being now richer than any other part of the mine.

The West Caradon adventurers met, on the 21st, when the accounts for the months of Oct. and Nov. were audited, showing a profit of 705*l.* 4*s.* 6*d.* for the two months' working. A dividend of 50*s.* per share was declared, leaving a balance in hand of 1265*l.* 18*s.* 4*d.*

Gonamena bi-monthly account was also held on the 21st inst.; a balance of 149*l.* 1*s.* 1*d.* was found in favour of the adventurers. The back of the 60, on Gilpin's lode, had been productive, and the cross-cut, to cut the same lode in the 80 fm. level, had been driven 30 fms.

At the Wheal Blencowe meeting, the intention of giving up the mine was abandoned, and instructions given the agent to drive a cross-cut at the 15 fm. level, to intersect some promising lodes north, which have not been seen under the surface. The financial statement shows a balance of 110*l.* 16*s.* 11*d.* against the mine, and a call of 10*s.* per share was made to pay off the same.

At Craddock Moor two-monthly account, a balance of 81*l.* 8*s.* 1*d.* was found in favour of the mine, and a call of 10*s.* per share was made. A new engine-shaft had been commenced, and the engine will be removed as soon as more favourable weather sets in; when completed, the operations would be commenced under more promising auspices.

At the Condurrow meeting, it will be seen that a dividend of 3*l.* per share was declared, leaving a balance in hand of 286*l.* 18*s.* 2*d.*

At the Lamheroe Wheal Maria meeting a call of 2*l.* per share was made, payable in four instalments of 10*s.* each. Our report of the proceedings at the meeting, in another column, contains an excellent and comprehensive report, from Mr. Adam Murray, jun., on the state and prospects of the mine, which is well worth perusal.

At Cameron's Coalbrook Steam-Coal, and Swansea and Loughor Railway Company meeting, the call of 2*l.* per share, made payable on the 6th of March next, was confirmed, which includes the call of 1*l.* made at a former meeting. A resolution for the immediate commencement of a railway was unanimously adopted. The prospects of the company appear to have assumed a more favourable aspect, and the proceedings of the day passed off with a far better feeling than had been manifested at several previous meetings.

At the South Australian meeting, a supplementary report was submitted by the directors, from which it appeared, that during the six months from 31st Oct., 1848, to 30th April, 1849, there had been an increase in the annual rent roll for town property, port buildings, and country lands of 1777*l.* 15*s.* 1*d.*, since which farther dispatches, bringing news up to the 24th August last, have been received of further leases having been taken, producing, in addition, 1044*l.* 12*s.* per annum. The nett proceeds of the year's wool had increased, being 5662*l.* 1*s.* against 3624*l.* 6*s.* 7*d.* of the previous year. One extraordinary feature was noticed in the report, but on which the directors cautioned the shareholders not to be too sanguine, although there could be no doubt of the fact—gold has been found on the company's lands. A scientific, practical mine surveyor had shown Mr. Giles, the company's superintendent, several specimens, and informed him that he should be well remunerated for superintending extraction works, by receiving one fifth of the profits. Upon the whole the report was satisfactory, and the prospects of the company warrant the expectation, that permanent and fair returns will yet be made for the capital invested in this interesting colony.

The manager has corrected the statement contained in our "City Article" of the 15th inst., relative to the Tamar Mines and Smelting-Works. It is our endeavour invariably to afford to shareholders the most accurate information; and we are equally averse with the manager to encourage the circulation of misconceptions; we are, therefore, bound to state, that our remarks were based upon the information received from a source well qualified to afford accurate information, in addition to our own personal reference to the statement of accounts, submitted at the last general meeting of shareholders, which more than confirms our statement. We are not desirous of placing this or any other property in a more prosperous condition than is warranted by its circumstances; but we are equally desirous of conveying to shareholders neither more nor less than a faithful account of their investment; and we cannot avoid suggesting, as a very tangible and substantial exhibition of the truth, a publication of the smelting and mining cost for the last three or four months, with the corresponding returns.

In foreign mines the transactions have been chiefly confined to St. John del Rey, National Brazilian, Copiapo, and United Mexican, in which limited business only has been done.

The accounts for the United Mexican Mining Company are dated the 9th Nov., and although in the produce of the ores reduced from the Mine of Rayas there is an apparent falling off for the past month, still the additional quantity raised, amounting to 200 cargos of picked ores, and its superior quality, will more than counterbalance this falling off in the reduction; indeed, this circumstance, from the well-known varying character of the mine, is of little moment. The last packet brought in specie $20,000, and 1000 Mexican doubloons; another remittance is promised to be forwarded at the end of the year. This remittance has placed the directors in a position to recommend a dividend of 7*s.* 6*d.* per share for the half-year, at the ensuing general meeting, on the 30th January next. The remittances to come round may be expected from the various operations of the company, and returns for quicksilver ships to be regular, and of good amount; and, in addition to this, we must remind our readers of the favourable position of the company's claim on the Mexican Government for the Zacatecas claim, which has been so zealously supported by Lord Palmerston, that, in a packet or two, we may look for a satisfactory arrangement. Indeed, when we look to the probable settlement of the Mexican Bonds, there can be no doubt that it will not escape the directors' attention to put in their claim, in the new arrangement of Mexican finances.

Accounts have been received from the Cerro del Bote Mine to 5th November The commissioner had suspended every work of trial in the mine, owing to the disappointment felt at not receiving supplies from England, aggravated by the circumstance of the usual monthly despatches not having reached him. He had not yet, however, suspended the drainage, and there being a few points in the upper workings producing ore, the raisings about meet the current costs, on the present reduced scale; but as there are no works of discovery going on, nothing can be expected from this promising undertaking until funds are supplied from England.

The despatches received by the St. John del Rey Mining Company are of the highest importance, inasmuch that the returns for the month of September are larger than any before obtained, the amount being 8569*l.* 19*s.* 10*d.*, leaving a nes profit of 4238*l.* 16*s.* 3*d.*, less duties. The advices are to the 16th October, to which date the returns are highly satisfactory, and the supply of stone abundant; whilst the health of the employed has improved, affording a greater increase of labour for the future.

The Imperial Brazilian letters received are to the 13th October, the gold report from Gougo Soco and Bananal for nine days shows a return of lbs. 4 3 18. A long report from the chief commissioner, describing the operations which he purposes carrying on, will be found under the head of Foreign Mines.

Advices from Linares Mines, to the 15th December, have been received. The works are progressing very satisfactorily. Two pairs of tributers have commenced working in the back of the 30 fm. level.

The National Brazilian letters are to the 12th Oct. The gold returns from Cocaes from 25th Sept. to 13th Oct., mks. 21 3 2 4½; Cuiaba, 26th Sept. to 16th Oct., mks. 3 7 2 3—mks. 25 2 5 4. A favourable change of ground had taken place at Cocaes a few days previously to date of letter. The result may be anticipated in the next advice.

We have, in another column, alluded to the outbreak stated to have taken place at Mica Bay, by the taking forcible possession of the property of the Quebec Mining Company, since writing which we find that the origin of the bad feeling expressed on the part of the Indians arose with the former Government under Sir Charles Metcalfe. To please Col. Prince and his needy supporters, without any inquiry as to their right to the lands, or their extent and value, or any attempt to settle with the Indians, these valuable tracts were parcelled out into blocks of 10 square miles, and ceded to certain favourites, with the exclusive right of mining. Although these lands might have been worth millions, the fee simple was absolutely surrendered for *four shillings per acre*. It is gratifying to learn that the present Government, although not the most efficient, are endeavouring to arrange matters; and it is to be hoped that the affair has to some extent been exaggerated. They came into office somewhat fettered in this matter by the acts of their predecessors, whose conduct in the affair has been, to say the least of it, disgraceful

RAILWAYS.—Railway shares were once more reported by the brokers and others to be deplorably bad. The traffic tables presented to the shareholders are shown to be most unsatisfactory. In the case of one or two lines, an improvement is said to have been experienced in the present receipts, as compared with those of the corresponding period last year; but the fact has to be proved; and with respect to the general feeling of the public concerning railway prospects, it does not, it must be admitted, in any way improve. London and North Western shares were done at the reduced value of 108½; and the distrust evinced by such a quotation gave at once a lower tone to the market generally. Actual closing prices:—Caledonian 10⅞ to ⅝; Eastern Counties 6¾ to 7; Midland 44 to 5; Great Western 57½ to 8½; London, Brighton, and South Coast 79 to 80; London and North Western 108¾ to 9½; York and North Midland 17 to ½. Boulogne and Amiens shares were lower by 10*s.* to 15*s.* per share. It was reported that the Northern of France Company had broken off the negociation with the directors for the leasing of the Boulogne and Amiens line, and hence the decided fall noticed.

The following arrivals of specie have taken place since our last:—The royal mail steamer *Dee*, arrived on Monday morning last, bringing the usual West Indian and Mexican mails, and in specie $1,841,933 on merchants' account, and $59,998 for account of the Mexican dividends, being about 382,000*l.* sterling. The Peninsular and Oriental Company's steam-ship, *Indus*, arrived on Tuesday, the 25th, having on freight 40 packages of specie, value 45,210*l.* The *Jupiter*, steam-ship, from the Mediterranean, has brought three packages of specie, and one of diamonds.

HULL, THURSDAY.—The share market, as is usual at this time of the year, is comparatively neglected; and as the comparison is with a period of continued inactivity, we need not say there have been few transactions since our last. Railway shares are, for the most part, flat at the daily quoted prices.

PRICES OF MINING SHARES.

Shares.	Company.	Paid.	Price.
BRITISH MINES.			
1000	Abergwessin	9	6
1024	Alfred Consols	6¾	12
1024	AshbartonUnited Mines	8¾	12
1024	Ballswidden	9	18
128	Balnoon Consols	42½	50
905	Barristown	5½	3 4
3650	Bawden	¼	¼ ⅜
6000	Baulbury	1	1
4000	Bedford	2¾ 4½	4⅝ 5
1280	Birch Tor & Vitifer	4½	6¾ 7
2500	Black Craig	5	10
8000	Blaenavon	50	10
5000	Blisland Consols	1	—
5000	Boumin Moor Consols	1	3
100	Botallack	182	30
120	Brewer	5	2½
256	Brimpts Tin	2½	2⅝
10000	British Iron, New, regis.	12	8
—	Ditto ditto, scrip	10	10
2400	Bryn-Arlan	2	6 6½
107	Budnics Consols	57½	10 12
1000	Calington	22	7 8
1000	Camborne Consols	7	7½ 10
20000	Cameron's Steam Coal	7	1
256	Caradon Mines	22½	10
256	Caradon United	24	5 8
256	Caradon Wh. Hooper	21	4½
1000	Carn Brea	15	105
3300	Carthew Consols	1½	7
114	Charlestown	220	—
500	Comblawn	54	4½
128	Comfort	45	65
256	Condurrow	20	85 90
2560	Cook's Kitchen	14	5
1000	Coombe Valley Quarry	5	5
1000	Copper Bottom	14	6½
900	Court Grange	7	10
212	Craddock Moor	20½	5
128	Creeg Brane	140	30
500	Cubert Mine	12½	—
1000	Cwm Erna	2½	1½ 2
1000	Daren	2	2 3
7100	Derwent	8½	6
516	Devon&CourtenayCon.	11	2½
1024	Devon Great Consols	1	150
1000	Dhurods	3	2
182	Dolcoath	30	20-25
2560	Drake Walls	5½	3
10000	Durham County Coal	45	5
3000	Dyngwin	10	10 12
512	East Alvemey	5½	6
2560	East Birch Tor	3	3
1024	East Buller	1	5
128	East Caradon	82	41
2048	East Crowndale	7½	1½
128	East Pool	15	65
9500	East Tamar Consols	2	1
268	East Tolgus	1½	4½
99	East Wheal Crofty	125	65
128	East Wheal Rose	50	600 620
—	Eastof Scotland Iron Co.	5	1½
123	East Wheal Seton	14	10
1280	Esgair Lleu	2	2 4
248	Exmoor Wh. Eliza	6	6
494	Fowey Consols	10	45
1024	Freiad Llwydu Mines	1½	3½
4000	Gen. Mining Co. for Irel.	1½	1½
256	Gonamena	44½	16
128	Goodvreal	4	2
256	Grambler & St. Aubyn	80	10
96	Great Consols	1000	265 270
512	Gt.Wh.Rough Tor Con.	24½	18 20
6000	Growa Slate Company	5	5
256	hawkmoor	192	70
6000	Heignston Down Con.	1½	1 1½
1500	Hennock Silver-Lead	5000	5
4300	Hennock Iron & Tin	21½	21½
512	Herodsfoot	10	10½ 12
10000	Hibernian	12½	1½
1000	Holmbush	22	8
1024	Kingsett and Bedford	1½	3⅜ 4½
787	Kirkcudbrightshire	8½	3 3⅛
2048	Lamberoue Wh. Maria	10	2½
252	Lamarth Consols	—	3½
256	Lelant Consols	37	20 25
160	Levant	—	180
1000	Lewis	17	9½ 10
1000	Llwynmalees	8½	13 15
3500	Llynvi Iron	50	50
253	Lostwithiel Consols	23	10
6000	Marke Valley	10	¾ 1
6000	Mendip Hills	34	3 3½
128	Metha	34	—
20000	Mining Co. of Ireland	7	5
256	New East Crowndale	3½	4½ 5
100	North Pool	45	320
140	North Roskear	5½	130
262	North Wh. Leisure	1½	2
18000	Northern Coal Co.	23	2
128	Par Consols	55½	650
1248	Pengelly Tin	1	1
6000	Pennant & Craigwen	2½	2
1024	Penzance Consols	22s 3d	4
512	Plymouth Wh. Yeoland	5½	6
200	Polsalth Consols	34	4½
2500	Rhoswiddol&Bacheiddon	10	10
10000	Rhymney Iron	50	13
10000	Ditto New	7	6½
1000	Rosewall Hill	1	5
256	Roseworva Mines	—	12
2048	Runnaford Coombe Tin	½	5
BRITISH MINES—*continued*.			
9000	South Tamar	½	2½ 2⅝
128	South Caradon	5	200
1100	South Dolcoath	5	½ 1
256	Stn. Friendan. Wh. Ann	30	28 30
256	South Molton	7	12 15
256	South Tolgus	16	100 110
256	South Trenawny	28½	5
2000	South Wales Mining Co.	1	1 1¼
128	South Wheal Basset	20½	425
121	South Wh. Frances	160	300
256	South Wh. Josiah	2	3½ 4
1000	South Wh. Maria	2½	1½
10000	Southern&Western,Irish	2½	4
280	Spearne Moor	30	40
94	St. Ives Consols	—	80
128	St. Michael Penkivel	5	10½
989	St. Minver Consols	1	6
1000	Stray Park	43	21 21½
9600	Tamar Consols	3	7 8
10240	Tavistock Consols	½	⅜ ½
1024	Tavy Consols	6⅝	1½
6000	Tincroft	7	12
68	Tokenbury	170	10
120	Tolcarne	8	25
256	Tregerden	3½	5
256	Trehane	1½	31
6000	Treleigh Consols	6	3½ ¾
2000	Trenance	3	—
96	Tresaveau	10	95
120	Tretheniian	5	15 17
120	Treviskey and Barrier	130	130 135
512	Trethevy Copper	1	1
1000	Tynwyn	2	2½
200	United Mines	50	160
256	Wellington Mines	25	35
128	West Buller	10	380
256	West Caradon	20	95 100
512	West Fowey Consols	40	12
—	West Par Consols	2½	—
2500	West Polgooth	5	5
512	West Providence	9	14½
200	West Seton	45	185 190
120	West Trethellan	5	5
512	West Wheal Frances	1½	3 5
256	West Wh. Trehaunip	9	8
8725	West Wheal Jewel	12	2½ 2⅝
200	West Wheal Tolgus	80	—
256	West Wheal Treasury	27½	10 15
1024	Whiddon Mines	4½	2
5200	Wheaton Copper	5	9½
107	Wheal Adams	13	190
1000	Wheal Agar	—	6
200	Wheal Albert	10	1
240	Wheal Amerton	28	15 20
128	Wheal Ann	—	60
512	Wheal Anna Maria	7	4
120	Wheal Bar	5½	10
200	Wheal Benny	14½	2
1024	Wheal Bray	11½	10
252	Wheal Caltock	9	20 25
182	Wheal Elizabeth	9	11 16
256	Wheal Fortescue	15	12 13
100	Wheal Friendly	70	60½
388	Wheal Franco	27	11 12
100	Wheal Henry	—	24
1024	Wheal Lawrence	2½	2½
112	Wheal Margaret	75	225 230
512	Wheal Mary Ann	5	33 34
5000	Wheal May	½	¼ ½
360	Wheal Oak	25½	5
3000	Wheal Pemale	1½	6
210	Wheal Prospect	4	7
120	Wheal Reeth	41	150
128	Wheal Rose	60	3
198	Wheal Seton	107	260
180	Wheal Sisters	35½	5
512	Wheal Sophia	5½	5
128	Wheal Spearne	10	68 70
128	Wheal St. Ann	30	35
580	Wheal Trescoll	10½	19 20
260	Wheal Trelawny	7½	80 81
256	Wh.Tremaine(St.Ervan)	9½	2½
1024	Wheal Tremayne	9½	11
267	Wheal Tryphena	140	30
1000	Wheal Vincent	2½	7
128	Wheal Vlow (Petrann.)	1½	1½
184	Wheal Vyvyan	—	60
FOREIGN MINES.			
5000	Altch Mining Company	1½	2½ 2⅝
15000	Asturian Mining Co.	15	2½
20000	Australian	4	6
6000	Barossa Range	1½	1⅝ 1¾
3000	Botanos	10	—
2000	Ditto Scrip	1	—
10000	Brazilian Imperial	23	3 4
12000	Cobre Copper Co.	40	29
10000	Copiapo Mining Co.	14	4 4½
20000	General Mining Ass.	20	10⅜
4000	Guadalcanal	5	1½ 2
2000	Ditto Preferential	2½	3 3½
6000	Kinzigthal Mining Ass.	2	1½
5051	Mexican Company	5½	—
20000	Mexican & South Amer.	3	1 1½
8000	National Brazilian	30	3½
104000	N. Brit. Australasian	1	¼
7000	Royal Santiago	10	5½
11000	St. John del Rey	15	11
43174	United Mexican ...Av.	28½	4½ 5
10,000	Worthing (S. A.)	2	2½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

JOINT-STOCK BANKS.

Shares.	*Companies.*	*Paid.*	*Div. p. cent.*	*Price.*
22,500	Australasia	£40	£3	£24½
20,000	British North American	50	6	49
20,000	Colonial	25	5	7
30,000	Commercial of London	20	6	21 21½
60,000	London Joint-Stock	10	6	17½
40,000	London and Westminster	20	6	25
10,000	National Provincial of England	35	5	36½
20,000	National of Ireland	22½	6	19½
20,000	Provincial of Ireland	25	8	43½
15,000	South Australia	22½	—	17½ 18
20,000	Union of Australia	25	6	38½ 39
60,000	Union of London	10	6	12⅝

CONDURROW MINING COMPANY.

At a meeting of adventurers, held at the mine, on the 20th instant, the accounts were examined and passed, showing—Tin ore sold, 267*l.* 16*s.*; balance last account, 294*l.* 7*s.* 6*d.*; sundries, 5*l.* = 297*l.* 3*s.* 6*d.*—By labour cost for Oct. and Nov., 117*l.* 4*s.* 9*d.*; merchants' bills, 36*7l.* 9*s.* 9*d.* whim-engine, 238*l.*; dues, 13*l.* 10*s.* 10*d.*; dividend of 3*l.* per share, 76*l.*: leaving balance in hand, 28*l.* 18*s.* 2*d.*—The appointment of an agent was postponed to the next meeting.—The following report was read to the meeting:—

Dec. 26.—The prospects of the mine are very much the same as reported on the 15th October. The 80 fm. level west has been driven 26 fms., and has been very productive of tin for the entire length; the lode in the end is 4 ft. wide, productive and very promising. The 80 east is driven about 20 fms. for the entire length on the flookan part of the lode; but we are now in course of driving north to get under the winze below the 70, which has yielded ores, on an average, to the amount of 100*l.* per fm., and which is now 4½ fms. below the 70. Probably a month may be required to cut this part, after which the cross-cut will be continued to intersect the Llandow'r lode. The 70 east has passed through a good bunch of ore 4 fms. in length, 8 fms. east of the winze above alluded to; the lode in the end is large, with a good branch of yellow ore, 4 in. wide, on the north wall. There is nothing that seems to require remark on the other levels; we are driving several of them, not doubting that they will ultimately become remunerative. I would add, that the sump shaft (Pryce's) is sunk 7 fms. below the 60, the lode therein averaging 2½ ft. wide, and yielding some tin.

ACCIDENTS—(*Continued*).

Durham.—W. Watson, aged 12 years, slipped and fell through an open ng about 16 or 17 ft. deep at the Grange pit, and died soon afterwards.

— E. Dawson was killed at the Houghton pit by falling down the shaft, 110 fms. de p.

— W. Quick, aged 14, was killed by falling under the tram waggons at Marton Colliery.

THE BRITANNIA BRIDGE.—The last accounts relative t) the progressing elevation of the second great tube, represent it as having attained an altitude of between 50 and 60 ft. above the Straits.

GREAT NORTHERN.—This company are entering into contracts for the construction of their passenger and goods stations on the north side of the Regent's Canal and King's Cross, and for their goods warehouses and locomotive buildings on the main line up to Peterborough.

LARNE, BELFAST, AND BALLYMENA.—The directors are making a return of 7*s.* 6*d.* per share to the scripholders in this defunct railway.

LEAD ORES.

TICKETINGS FOR ABOUT 100 TONS (20 CWTS.) NEWTONARDS LEAD ORE.

Douglas, Isle of Man, December 22.

Bidders.	*Price per Ton.*
T. Somers—Bristol	£9 9 6
Combmartin and North Devon Smelting Co—Barnstaple	9 10 0
Sims, Willyams, Nevill, and Co.—Llanelly	9 12 6
Tamar Smelting Company—Tavistock	9 13 6
Walker, Parker, and Co.—Chester (purchasers)	10 1 0

Ticketings at the King's Head Hotel, Holywell, December 27.

Mine.	*Tons.*	*Price per Ton.*	*Purchaser.*
Pantymwyn	14	£10 1 6	Newton, Keates, & Co.
Pen-yr-henblas	40	10 10 6	ditto
ditto	40	10 11 6	Walker, Parker, & Co.
Westminster	40	9 17 0	ditto
Jamaica	50	10 6 0	Newton, Keates, & Co.
Belgrave	30	10 5 6	Walker, Parker, & Co.
Macsysafn	50	10 7 6	J. P. Eyton.
Milwr	50	12 6 0	Walker, Parker, & Co.
Pantyffrith	20	11 1 0	Mather & Co.
ditto	20	12 13 0	J. P. Eyton.
Conlig	80	10 10 0	Walker, Parker, & Co.
Total tons			434.

Sold at Liskeard.

Wheal Mary Ann	78	£17 4 6	Pontifex & Co.
ditto	34	7 1 0	R. Michell & Son.
ditto	34	7 1 0	Penpoll Lead Co.
Trehane	58	25 5 6	Sims & Co.
South Tamar	66	17 7 0	Pontifex & Co.
Wheal Adams	25	9 3 6	Sims & Co.
ditto	25	9 3 6	Pontifex & Co.

Sold at the Mine.

East Wheal Rose	50	£14 12 6	Tamar Company.
ditto	46	14 5 6	ditto
ditto	37	13 13 6	T. Somers.

BLACK TIN.

Mine.	*Tons.*	*Price.*	*Purchaser.*
Birch Tor	4½	£46 10 0	Daubuz.

COPPER ORES.

Sampled Dec. 12, *and Sold at Andrew's Hotel, Redruth, Dec.* 27.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
United Mines	106	£6 7 0	Par Consols	76	£8 8 6
ditto	97	3 5 6	ditto	72	6 9 0
ditto	90	1 0 6	ditto	61	6 6 0
ditto	84	6 17 6	ditto	50	6 2 6
ditto	83	4 15 6	South Caradon	70	8 13 0
ditto	79	5 16 6	ditto	63	5 7 0
ditto	76	4 6 6	ditto	40	6 6 0
ditto	74	3 19 0	ditto	22	5 7 6
ditto	68	5 7 0	ditto	20	6 16 0
ditto	62	5 12 0	Tresaveau	74	3 17 6
ditto	52	7 13 0	ditto	65	2 16 0
ditto	50	3 11 6	Treleigh Consols	49	5 9 6
ditto	45	3 4 0	ditto	30	3 6 0
ditto	42	1 12 0	ditto	16	1 16 0
ditto	26	1 17 0	West FoweyConsols	88	4 19 0
Wh. Comfort	100	2 7 6	West Wh. Jewel	39	4 3 6
ditto	99	1 14 6	ditto	37	5 18 6
ditto	85	1 10 0	West Trethellan	50	3 8 0
ditto	63	2 4 0	Wh. Penhale	18	4 1 0
ditto	43	3 12 0	Carthew Consols	15	5 19 0

TOTAL PRODUCE.

United Mines	1034	£4684 17 6	West Fowey Cons.	88	£435 12 0
Wh. Comfort	390	829 3 6	West Wh. Jewel	76	382 1 0
Par Consols	259	1795 5 0	West Trethellan	50	170 0 0
South Caradon	215	1448 5 0	Wh. Penhale	18	72 18 0
Tresaveau	139	470 7 6	Carthew Consols	15	89 5 0
Treleigh Consols	95	396 1 6			

Average Standard ..... £110 17 0 | Average Produce 6¾
Average Price per ton £4 10 6
Quantity of Ore ..... 2379 tons | Quantity of Fine Copper, 156 tons 4 cwts.
Amount of Money £10,773 16 0

LAST SALE.—Average Standard ..... £100 18 0.—Average Produce ..... 9.
Standard of corresponding sale last month, 108*l.*—Produce, 7.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	93	£368 8 3
Vivian and Sons	445	1539 0 6
Freeman and Co.	360	1293 11 6
Grenfell and Sons	715	3706 0 3
Sims, Willyams, and Co.	366	1650 7 0
Williams, Foster, and Co.	211	1365 15 6
Schneider and Co.	188	845 18 0
Total tons	2379	£10,773 16 0

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—North Roskear 900—North Pool 607—Consolidated Mines 594—Tincroft 465—Wheal Seton 373—Fowey Consols 312—South Wheal Frances 215—South Wheal Basset 147—South Roskear 103—Wheal Henry 101—Wheal Vyvyan 34—Polberrow Mine 15—St. Austell Consols 5—East Crinnis 4.—Total, 3785 tons.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth, Mines and Parcels.—Carn Brea 73—Tywarnhayle 401—Par Consols 252—Levant 188—West Wheal Buller 162—West Wheal Treasury 106—Wheal Tremayne 88—Wheal Agar 80—Wheal Mary 80—Charlestown United Mines 60—Alfred Consols 37—Herland 16—Godolphin 14—East Wheal Treasury 9—Trelyon Consols 8—Wheal Squire 5—Spearn Moor 5.—Total quantity of ore to be sold, 2247 tons.

COPPER ORES

at SWANSEA, for sale Jan. 3.—Cobre 73, ditto 70, ditto 67, ditto 65, ditto 58, ditto 49, ditto 47, ditto 44, ditto 115, ditto 112, ditto 105, ditto 72.—Burra Burra 60, ditto 59, ditto 58, ditto 57, ditto 56, ditto 55, ditto 53, ditto 52, ditto 50.—French Slag 71.—1447 tons.

NOTICES TO CORRESPONDENTS—(*Continued*).

"An Old Subscriber" (London).—Telford was the engineer who erected that masterpiece of suspension bridges—the Menai. Mr. I. K. Brunel designed and executed that over the Thames at Hungerford Market; but we are not aware of any engineers of the present day being particularly famous, one more than another, in the construction of this description of bridge, the principles of which are now so well known.

NOTICES TO CORRESPONDENTS.

*** We must impress upon our correspondents, the necessity of invariably furnishing us with their names and addresses—not that their communications should, consequently, be noticed, but as an earnest to us of their good faith.

In reference to the Notice, in our last Journal, respecting the transactions in Alfred Consols shares, we have had an interview with the party accused, and, from his explanation, we find so many what may be considered purely private matters, and those affecting other parties, in the detail, that we should not consider ourselves justified in publishing a statement, were he to prepare one for that purpose. Most certainly, we must admit, he clearly removes all the *criminal* appearance the subject assumed in our abstract of the letters of Mr. Richards. That to which we attached most importance—leaving the two letters unanswered—is simply explained by their contents having been personally explained.

"T. G." (Birmingham).—We have no recollection of such an apparatus for raising mine as our correspondent describes. The only *atmospheric* apparatus for this purpose was one proposed by Messrs. Clarke and Varley, on the same principle as their atmospheric railway tube, patented about 1845; and one, the proposal of a French engineer (which certainly appears, to our comprehension, an infringement of the former), described in the *Mining Journal* of July 8, 1848.

THE HOT-AIR ENGINE v. STEAM.—We are compelled to postpone the communications of Mr. Creddock and Mr. John Weston until our next.

Mr. Lake's paper, on "The Philosophy of the Electrical Machine," shall also appear in our next.

"W." (City).—Consult some respectable broker previous to purchasing, or advancing money upon, the shares. We know nothing of the mine or parties concerned.

"An Inventor" (Warwick).—Apply to Messrs. Campin & Co., at the Patent Office, 210, Strand, who will furnish an official circular of information, with list of charges, &c.

"D." (Penryn).—Andrew Smith, of Mill-wall, and Messrs. Newall, of Gateshead, are the only patentees of wire rope known to us. We have heard there is a manufacturer in Lancashire, but are not acquainted with the name or address—perhaps some correspondent will furnish it.

METAL FOR GUN BARRELS.—Mr. W. Greener, of Aston New Town, Birmingham, in writing to the *Times*, corrective of a statement of Colonel Hawker's, says—"Allow me to correct a wrong impression conveyed in the quotation from my work on the gun:—'If you want safety, you will not find it in steel barrels.' This was my opinion 15 years ago. I should be obtuse, indeed, did I not confess that the many wonderful stretches of improvement in that period in the science of metallurgy would change better formed opinions than mine. Having been principally instrumental in bringing the manufacture of metal for gun barrels to the high state of perfection it has reached, I cannot allow the bursting of a gun barrel, 'caused by injudicious manufacture,' to become the medium of depreciating the greatest improvement in metallurgy we as a nation have yet effected. That the fractured barrels have been represented as 'a pair of steel barrels' is true—refer to the report which appeared in the *Times* of Wednesday last, and you will read, 'Lastly, the barrels are not constructed of all steel, but a mixture of half iron, half steel,' by no means approximating to the tenacity of laminated steel barrels, of which they are a spurious imitation. The use of the term 'steel' is only generic. There are as many varieties of steel as of iron, but with this important difference—the base of all steels must be the best iron. The application of carbon to iron by the aid of chemistry is now so accurately measured, that cast-steels of various degrees of hardness are constantly produced. Welding steel has long been known, and is now easily made at great perfection, the iron receiving a modicum of carbonisation, just enough to bring it to the state required to melt in a crucible. When in a state of fluidity the grosser matter in combination floats to the surface, and is removed. A dense mass of pure chrystalline metal is thus obtained; steel you may call it, it is strictly so; but note its progress during its various transformations. Now an ingot, to-morrow musical wire, or, if you will it, finer still, even to the fineness of the hair on your head. The ductility, the wonderful ductility, is here displayed. You could not do as much with iron. Why? Because it is not dense enough; its specific gravity is 10 per cent. greater than any iron. Double tenacity is displayed in its ductility. These are what is wanted in a gun barrel; here you have safety, the greatest power to give projectile force. Gun barrels, properly made of this metal, are 'strictly indestructible by gunpowder,' any quantity you choose to try. I shall be happy to practically display it. Hundreds of spurious imitations are constantly being produced, and in justice it must be admitted the extreme lightness of some of them show the metal good, however injudiciously constructed, and justify the hope that, when you once institute a proper regulation to ensure the public safety, a gun bursting made by this metal will become an impossibility."

We are unavoidably compelled to postpone a numerous list of replies to correspondents.

*** It is particularly requested that all communications may be addressed—

TO THE EDITOR,
Mining Journal Office,
26, FLEET-STREET, LONDON.

And Post-office orders made payable to Wm. Salmon Mansell, as acting for the proprietors.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, DECEMBER 29, 1849.

The MINING JOURNAL is published at about Eleven o'clock on Saturday morning, at the office, 26, Fleet-street, and can be obtained, before Twelve, of all news agents, at the Royal Exchange, and other parts of London.

In taking leave of our readers at the termination of the present year, and previous to entering on the duties of the commencement of another—the jubilee year of the nineteenth century—we are induced to call attention to the contents of the yearly volume of the MINING JOURNAL for 1849, which our present Number renders complete. A glance at the *index*, published herewith, will convey a tolerably correct idea of the importance of the subjects treated on; while, on reference to the various Numbers, many highly interesting communications will be found from talented and esteemed correspondents, among whom we may mention the names of Dr. MURRAY, Messrs. MITCHELL, ROBERT and DAVID MUSHET, LEIGHTON, RICHARDSON, LAKE, BAGGS, and others; besides descriptions and illustrations of all new inventions, numerous papers on scientific subjects, and discussions on various topics connected with mining, and the arts and sciences, rendering the whole not only an important work of reference at a future time, but one which may be often taken up with pleasure and edification, if only for the beguilement of an idle hour. A steady improvement has been gradually taking place in mining pursuits, for a review of which for the past year, we refer to the remarks in an adjoining column; and while we congratulate our readers on the present prospects of the adventurer and working miner, we sincerely trust that a continuous and increasing influx of prosperity will mark the passage of the forthcoming year, bringing comfort, plenty, and content to "One and All."

"By Heavens! I am for a Government audit of railway accounts." This is the free and fervid exclamation of an individual of great observation and experience in railway affairs—of one who has seen the intimate manner in which the several branches of a railway staff act upon each other—who has dwelt within the first veil of the railway temple, and himself superintended and touched the secret wires which move the visible figures in the great railway masquerade. After such opportunities as these of acquiring a correct knowledge, and of forming a sound judgment, this gentleman thinks that any audit, short of a Government audit, will be unsafe, unsatisfactory, and inefficient. If the office is in the gift of the companies, or if the officer is either paid by, or responsible to, them, then the utmost that the chairman of the South-Western line conceives you have a right to calculate upon is a simulated audit, and a questionable exposition of the actual circumstances of the lines. The opinion of this able man of business has, as our readers are aware, long been our opinion; for it seemed to us that, if you would have an independent examination of accounts, it was of all things necessary that those who are intrusted with such examination should not in any sense be dependent on those whose malversation they may find it their duty to detect and to expose.

The objections to an audit *dehors* the companies are, without any exception that we know of, sentimental, and not substantial; the one most relied upon, and most reiterated, is this, that it is an interference with private rights. This, for a body of railway proprietors, is a strange objection indeed; their whole fabric, from east to west, is built upon an invasion of private rights. There are, probably, in this kingdom thousands of individuals who had the most indisputable right at common law to the enjoyment of their fields, their gardens, and their dwelling places—many of them entertaining an attachment to their rural holdings, for which no remuneration in money could be either an equivalent or a compensation; yet into these domestic sanctuaries the men of the railway era came with the new statute in their hands, and these homesteads, though loved and cherished with the strong instincts of Nature, were in a day as though they never had been. It is these men who have done this in instances past enumeration, who complain that an honest audit of their accounts will be an interference with private rights. Well, be it so; but we hope that Parliament, by a short enactment, will give the public a statute right, if it be necessary, to enforce an independent quarterly audit of the railway accounts of the entire kingdom.

A report of a special meeting of shareholders in CAMERON'S STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY, will be found in another column, which, though not remarkable for the length of time occupied, or any new features being developed, will, we have no doubt, prove of much importance to the future interests of the shareholders. With a perfectly unanimous feeling, the meeting confirmed the call made at a previous one on the 6th inst., and also re-resolved on the construction of the railway to the shipping port, without which it would be madness to attempt to carry out the operations of the company with any practical benefit. The real circumstances of the company being now known, and the certainty that the facilities of railway transit will render the raising of coal highly profitable, a greatly increased degree of confidence appears to be established; and the general opinion prevails that, under the prudent management which has lately been evinced, a very short time will elapse ere profit will be realised on the operations. The terms which have been entered into with the Cameron family, as also those offered for the construction of the line, are of a highly favourable nature; and there is every ground for hope that the undertaking, which, from the first, could scarcely be called speculative, but which was affected by untoward circumstances, will still prove a highly remunerative one, both to the promoters of the company and the shareholders.

From the vast importance of the science of geology, either as regards the light it throws on the industrial resources of a country, the physical history of the earth, or the rapid advancement which has taken place in comparatively a few past years in its development, we make no apology for introducing thus prominently some outlines of an inaugural lecture, delivered in Queen's College, Galway, on the 17th instant, by Professor W. KING—giving, as it does, a perfectly elementary and lucid description of the various branches and divisions of this interesting science. After a definition of what geology consisted, exhibiting it in all its comprehensiveness, he proceeded to consider the several well marked divisions into which it naturally divides itself; and, first, as to the nature of the materials composing the earth. But few persons in the neighbourhood were entirely unacquainted with the various rocks occuring in the district—the limestone east of Lough Corrib; the greenstone on which Galway is built; the granite marbles, serpentines, and mica slates of Connemara. It was the province of geology to make us acquainted with every particular of these rocks—to explain how the old red sandstone conglomerates of the Killeries, have been formed from large mountains of rock, similar to the granite of the district—how the beds of mountain limestone near Menlo have been formed from the deposition of calcareous matter, suspended in an ancient ocean—how rocks have been produced, consisting entirely of the remains of animal forms, so minute that thousands could have revelled on the point of a needle—how extensive deposits of coal have been formed from the decomposition of vast accumulations of vegetable matter—how some rocks have been baked, or nearly fused, through volanic agency, so as to have nearly lost all traces of their original character; and how it is concluded that the porphyries and granites on the northern side of the Bay of Galway were originally in a state of liquid fusion, like melted lava. Nor must the metals and pure minerals be overlooked, so extensively employed in human economy, or by what means the numerous beautiful crystallised substances studied by the mineralogist were produced.

The next division of geology treats of the various plants and animals which have died on the surface of the earth, and has been termed "Palæontology," a name derived from three Greek words—*palaios*, ancient; *onta*, beings; *logos*, discourse—of course, meaning a discourse on ancient animals and plants. This branch of study was the most interesting and philosophical which could engage the mind of man; it treats of the *order* of creation of the various plants and animals with which the earth has been tenanted, yet it is only of late that it has attracted the attention of naturalists, and is probably destined to effect a complete revolution in what is called a natural classification of the organic kingdom. In general terms, palæontology may be said to teach us that shells were created before fish—fish before reptiles—reptiles before quadrupedal animals, and these before man. It is precisely the same in the vegetable kingdom; the first created plants were certain sea-weeds, which vegetated about the time the Silurian slaty rocks of Doughterard were formed; next innumerable ferns; then trees, belonging to the next grade of organisation; club mosses and fir trees were living when the limestone of the district was in progress of formation. At a still later period higher tribes of plants were in existence, and from these we ascend to the highest forms—those now living, whose creation may be said to be comparatively recent.

The third division of geology treats of the physical changes which the structure of the earth has undergone—ground which yields ample food for the enlargement of the mind, and which discloses to the student of Nature phenomena which sink earthquakes, volcanoes, deluges, and other devastating influences of present periods into insignificance. During the earliest organic changes of formations which have led to the earth's present structure, it is clear its surface was rarely stable. Entire regions were suddenly elevated into mountain chains, or as suddenly sunk into profound abysses. The bed of the ocean was scarcely ever permanent—what was dry land to-day, supporting a luxuriant vegetation, would be fathoms below a sea or lake to-morrow; creatures that were revelling yesterday on the bed of the ocean at a depth suiting their existence, are now plunged into profundities, or uplifted to mountain heights, where they become instantly annihilated. At one period the earth's surface was as unstable as the ocean's bed—it was continually heaving and sinking through the agency of external or internal forces. So yielding was its crust, that it readily yielded to the weight of the sediments which the then large rivers deposited on it. On no other view is it possible to explain the gradual accumulation of certain ancient beds of sandstone and mudstone, measuring several hundred feet in thickness; and in no other way can we account for the intercolation of innumerable beds of mineral fuel with the shales and freestone to be seen in the coal districts of England. These phenomena have resulted from causes which have long ceased to operate with their former intensity, as later formations, belonging to after ages, and such as are now in progress, rarely exhibit dynamic evidences of such magnitude.

Having thus described the principal divisions of the science, the lecturer proceeded into detail on the subject of stratification from the granite and other primitive rocks having no fossils, up to the London Clay, the Norfolk Crag, and deposits now forming in our lakes, seas, and oceans, to follow through which our space will not allow. He next alluded to the importance of the science of geology to the civil engineer, the architect, the agriculturist, and other professions and callings; and that once well versed in the general fundamental principles of this noble science, it will be a first-rate means of promoting his professional advancement, and a never-failing source of high intellectual enjoyment. The late Dr. WILLIAM SMITH was the first Englishman who made himself acquainted with the relative position of our home rocks, and was very properly called the "Father of English Geology." He was one of the most skilful of canal engineers, and to his acquaintance with geology he attributed all his professional achievements. It was through the knowledge derived from his favourite study that he gave advice diametrically opposed to the general view of the coal agents of the north, that extensive beds of coal existed beneath the magnesian limestone formation of East Durham, and which has now proved to be the chief source of colliery industry there. Mr. KING then adverted with much force to the melancholy ignorance displayed by many gentlemen fresh from Oxford or Cambridge, possessing all the accomplishments these seats of learning could bestow, on geology and natural history, and congratulated the students of Queen's College that they were there compelled to attend a course of lectures on this science. A description of the various fossil animals and plants throughout the various strata followed, and the lecturer then noticed how the Scriptural account of the creation has been cut and twisted, so as to square and dovetail with theories now proved to be utterly false. He showed that before any attempt can be successful in the way of reconciling the Mosaic relations with present geology, before any grand geological theory can be framed, a vast amount of unknown, unthought-of, evidence must be obtained, to prove that the scale of organic nature existed during any portion of this epoch. Hence, in the absence of opposing testimony, the geologist is led to conclude that man has been, comparatively speaking, but a short time an inhabitant of the earth; how long he will remain, what intellectual progress he has yet to make, and whether he will be succeeded by other beings still higher in intellectual power, and more wonderful in structure, are questions beyond our reach, and their answer will only be declared through future operations of the unerring laws of an inscrutable and all-wise Providence. The audience were then desired, in duly appreciating the deductions of the geologist, to renounce all definite idea as to the duration of the world—not to fix thousands or millions of years to its fleeted history, but to think of it as a great cycle, so vast, so approaching to the infinite, as to reduce human conception of eternity to a point, to a mere infinitesimal period of time.

IMPROVEMENTS IN DRAINING AND WORKING MINES.

Mr. John Bosvarva, in a lecture on mining, delivered before the Natural History Society of Plymouth, makes the following remarks:—Metallic lodes, where they are not laid open by a river course, quarry, or some accidental laying open of the ground, are sought for by sheding, or examining the shelf, or upper part of the rock. If a miner, acquainted with the nature of a lode, sees a stone broken away from a lode, commonly called a shode stone, in a valley, he naturally infers it has descended the hill; he commences by digging a pit; if he finds the same appearance of stones, he continues the same operation until he does not find any; he then concludes the lode must be between the two last pits, he consequently examines the shelf between them, and is seldom disappointed in finding it.

The first improvement in drainage, was by the pump called the "rag and chain," so named from a quantity of rags or skins, at intervals, bound up to the size of the pump, on a chain or rope, revolving round a cylinder, worked by hand or water-wheel at the surface, which, passing through the pump, forced the water up before it. The next improvement, was the common bucket or lifting pump: as long as the notion prevailed that the principle that water could not be raised more than 33 feet was applicable to a pump whose bottom was in the water, each lift of pumps was confined to 30 feet, so that in a mine 60 fathoms deep, it would require 12 lifts of pumps, the lower ones supplying the upper by means of cisterns attached to each lift. This method was called "shammeling," and the pumping gear the "shammel engine;" it was long considered the "ne plus ultra" of perfection, notwithstanding it was found very troublesome and inconvenient by filling the shaft with pumps and pump rods; this was the cause of much complication and consequent weakness, and it could only be applied where the quantity to be pumped was moderate, and did not require any rapidity of motion in the pump gear; this defect was severely felt in constant breakages and great friction in working so many buckets; these disadvantages suggested the lengthening of the lift of pumps, and drawing the water to the surface by the power of the water-wheel, in addition to the pressure of the atmosphere. It was soon found that water could be raised with as great facility 30 fathoms as 30 feet, with less wear and tear. I am not aware when this improvement was first introduced, but a writer in 1765, describing the high and low pump, would imply, from his remarks, that they were not then in general use.

The next and last improvement in drainage was the "plunger" or force pump, by which the weight of the pump rods and the piston, working in a cylinder at the bottom of the mine, was applied to force the water up through a column of pumps to any height required. It has been found inconvenient to attempt any greater length of lifts than 30 fathoms, or 180 feet. The miners are rather fanciful in naming the lifts of pumps; the upper one, which discharges the water at the surface, is called the "tye," the others in the order of succession are the "rose," the "crown," the "lily," the "violet," and so on, the lowest being the "poppy." These improvements required, from the increase of the pressure of water, that the strength of the pumps should be increased; the wood pumps were replaced by iron, and, where the corrosive nature of the water required it, brass pumps, or iron pumps lined with brass, were used.

With the increased facilities of drainage, corresponding improvements were required for raising the produce of the mines to the surface; the bucket raised by manual labour was succeeded by the kibble drawn up by the winch—a rope or tackle wound round a wood cylinder by an iron handle; then came the "whim," worked by horses, which has continued in use with various improvements up to the present time; it is, however, superseded in the large mines by drawing machines, worked either by steam or horse-power.

The "whim" was the invention of a working miner, who, being in a studious mood, was asked by his comrade what the matter was, and replied he had a whim in his head, and his invention was so called accordingly.

On the introduction of gunpowder for blasting the rocks, the miner was subject to continual danger from premature explosions; the hole in the rock, when bored sufficiently deep, had the powder placed in the bottom, an iron rod or needle was then inserted, and the hole filled up with sand or clay rammed in quite tight, the needle was then withdrawn, and a rush inserted; this, when ignited, burned gradually down to the powder, allowing sufficient time for the miner to reach a place of safety. The iron needle at times, when struck with the mallet, would give a spark of fire which ignited the powder, and serious accidents were caused thereby. About 30 years since a copper needle was substituted, but such was the force of habit, and the iron being cheaper than the copper, that it was only by the inflicting spales or fines on the men that the use of iron was discontinued. The copper needle was superseded, about 17 years since, by the invention of the safety fuse, being a small hemp cylinder, well saturated with tar, and filled with powder—this is now in general use.

Within the last 40 years there was not a mine in Cornwall 100 fms. deep. The Consolidated Mines, at Gwennap, were, at that time, many small mines filled with water. The steam-engine, and an outlay of some 60,000*l.* or 70,000*l.*, has enabled the workings to be continued to a depth of 300 fathoms, or 1800 ft., under the hill, the perpendicular shaft being nearly 1500 ft. deep. The weight of the pump rods which have to be lifted every time the pump buckets require gearing is little short of 150 tons.

QUEBEC [illegible] COMPANY.—Since the notice in our last Number of the capture of the mining property at Mica Bay by the Indians, we have not received any further accounts on which we can rely for the correctness of the statements as to the actual results. It is, however, attempted in some quarters to justify the neglect or refusal of Government to pay these claims. They say that although the Indians had sovereignty of these territories, they became part of the sovereignty of France, and by the treaty following the conquest they were ceded to Britain; that this right had always been acknowledged by the Indians, who recognised the sovereignty. That the rights of the Indians were merely rights specifically reserved, of casual or periodical occupancy, for purposes of hunting or fishing, and did not extend to the obstruction of civilization, so that they were compensated for the actual loss inflicted, and had themselves an opportunity given them, if they choose, to adapt themselves to a new mode of life, and a more productive occupancy. That the sum of £5000 annually, if measured by actual damage to their hunting ground, is excessive; and, if claimed as a portion of profits, is equally so—for no profits have been realized. This is most undoubtedly a justification on the part of the company, but says nothing for the conduct of the Government; they received the cash, and ought to have protected and assured the title they had conveyed. They might have made the bargain very easy, as the Indians asked compensation in the most satisfactory mode. They most prudently did not want money, but the value to be expended in schools, and that their children be taught by mechanics how to work in wood and iron. A wise and paternal Government would have rejoiced at the manifestation of such a spirit, and the opportunity of effecting so much good. Whatever injury is inflicted they will have to make good, and, however it terminates, the result will show that they have been—besides unjust—penny wise and pound foolish.

THE GARTH IRON WORKS.—After a repose of some months' duration, these works, lately purchased by Henry Scale, Esq., may be said to have fairly started up from a state of lethargy, and now present something like unmistakeable symptoms of what our friend Jonathan would term "going a-head." For several weeks past, matters in the mineral department have been vigorously carried on, and in the furnace department also certain portentious sounds have been heard. The splendid blast engine has had its "steam up," during several days past, indicating, by its notes of preparation, not only that there is "life in the muscle," but also, that some important movement will shortly take place. The hydraulic apparatus, or "lift," for conveying the materials to the furnaces, has likewise been set in motion, and from its semi-aerial appearance has attracted considerable attention, many persons having availed themselves of a "trip" to the aerial terminus. It is intended that two out of the three furnaces shall be put in blast on 1st Jan., which circumstance, after a long season of depression, will be hailed by many as an omen of the "good time coming."—*Swansea Herald*

ACCIDENTS.

Brymbo Iron Works.—The fire at the Wellington Colliery, belonging to the Brymbo Company, noticed in two former Numbers, has at length been extinguished, by the plan proposed by Mr. Goldsworthy Gurney, and successfully adopted by Mr. Darlington, at the Astley Colliery, when on fire, near Manchester. The first means taken to put out the fire were, to close in the shaft to exclude the air, and after a time it was thought the fire was extinguished; but so great was the accumulation of carburetted hydrogen from the old works, into which the man had broken, that from the admission of fresh air four or five terrific explosions blew off the covers of the shafts as fast as they were fixed. At length, a large stove for burning coke was constructed, the mine was filled with carbonic acid, and the covers replaced, in which a tate they will remain a sufficient period to thoroughly extinguish the fire.

Pelsall.—As T. Stackhouse was working in a pit at Gosset, a slip of coal occurred, which jammed him between the slab and the side of the pit. His skull was fractured, and his brains were protruding through his ears, and when got out he was quite dead.

Bilston.—E. Williams was killed by falling down the mouth of the pit at Riding Fi Colliery, Sedgley.

Lowes Mines.—J. Allen and a companion having just filled a kibble, as Allen was the act of collecting some scattered stones, he stepped backwards, and his foot from the "shaft piece," he fell from the 60 to the 70 fm. level. The poor boy's arms and one of his legs were broken by the fall, but he did not appear to be otherwise injured—he died, however, in two or three minutes after he was found.

Restormel Mine.—W. Keast and J. Jane were killed by a quantity of ground giving way.

Original Correspondence.

EARTHY DEPOSIT IN BOILERS.

SIR,—In reference to the above subject, it is not difficult to calculate the average and expected amount of deposit *regularly* formed in boilers from the constant use of chalky and magnesian water. Suppose we take the *minimum*, and say that any water on analysis furnishes us with 10 grains of carbonates per gallon; these will be invariably deposited after a few minutes' boiling; then if we suppose a boiler requires 50 cubic feet, or, in round numbers, 300 gallons of water per feed, this will produce a deposit of 6 ozs.; and if the boiler in question be fed six times a day, this will amount to 2¼ lbs. a day, or nearly 16 lbs. per week, which will be distributed more or less regularly over the internal area of the boiler. This, be it observed, does not include the still *more intractable* deposit arising from a concentration, or, perhaps, to speak more correctly, *accumulation*, of insoluble sulphates—insoluble as well from *the quantity* existing, as the fact that sulphate of lime is more insoluble *in hot and boiling* than in cold water. All these evils can only be remedied by the use of none but depurated water, which either of the *recently patented* processes will most certainly accomplish. For boiler use, however, I would recommend the hydrate of either strontia or baryta, as being by far the most economical, as well as abundant.—J. HOUSLEY: *Ryde, Dec.* 26.

P.S. The depuration of a water containing carbonates, is complete in about five minutes; but it is somewhat longer when sulphates are contained, and according to the quantity—say, from 20 to 30 minutes.

ON THE MANUFACTURE OF IRON RAILS.

SIR,—I find, by Mr. Thorneycroft's letter of the 20th instant, that he is losing temper, which will induce me to close a correspondence provoked by himself, through his adopting the sentiments of the letter of the "Staffordshire Ironmaster,"—although, much to Mr. Thorneycroft's honour, he has since repudiated the slanders contained in that said letter, but still adhering to this "Ironmaster's" views respecting the quality of Welsh rails. It is a quibble now to say that they never mentioned Welsh iron. The whole tenor of their correspondence has been to prejudice the public against it; but I fear Mr. Thorneycroft has lost his usual discretion and judgment, or he would never sanction the *mis-statement* which he has published relative to the 20,000 tons of rails lately agreed for by the London and North-Western Company. Mr. Thorneycroft must be aware that this was not a *bond fide purchase* of rails, and had no reference whatever to the then market price. He must also know that the offers of the Welsh, as well as the Staffordshire masters, were rejected, and that the terms finally arranged with a Yorkshire house were for the re-manufacturing of the old and worn out rails on the London and North-Western lines at so much per ton for the re-manufacturing, without reference to the market price of iron (the contract extending over several years). Such a transaction as this cannot tell either in favour of one description of iron or the other, and, therefore, the mention of it is quite a delusion as regards the argument as to the quality of iron best suited for the permanent way of railways. As to Mr. Thorneycroft's assertion, that "I have not given him particulars, and that the course I have taken is neither manly or creditable," I leave you and your readers to decide between us. I deal with facts, not advertisements; and, for my own part, I think giving Mr. Thorneycroft the authority of one of the most eminent and practical engineers of the day (Mr. Dockray), stating the railways upon which the rails to which I have referred are laid down, asking Mr. Thorneycroft to go and see these rails, and judge for himself, are sufficient guarantees that I do not fear investigation into the truth of the assertions which I have made. Railway engineers, as well as others interested, are now also convinced of the fact, that red-short iron rails are the best suited for the permanent way of railways, and that they can be purchased in Wales of this quality at from 2*l.* to 5*l.* per ton less than the rails advertised by Mr. Thorneycroft. I can assure my worthy old friend that I am quite as anxious as he is to see all trades in a flourishing condition, *good wages* to workmen, and remunerating profits to manufacturers and agriculturists; but his allusions to British farmers, and other extraneous matters, have no reference to the subject under discussion—viz.: "the quality of iron best suited for the permanent way of railways." I now take my leave of Mr. Thorneycroft, wishing him, with all my heart, a merry Christmas, and a prosperous new year.

London, Dec. 28. P. DAVIS.

CHEMICAL STRUCTURE OF IRON.

SIR,—Your correspondent "Wootz," near the close of his letter in your last Number, asks, "Can any of your correspondents elucidate the phrase, crystalline charcoal iron, which, we are told in an advertisement extraordinary, forms a portion of the patent antilaminating charcoal rails?"

Your correspondent's theoretical knowledge of iron making will, at least, enable him to know that crystals of iron exist, that iron passes into the crystalline state during some of its processes of manufacture, and thus crystals of iron may be found, some of which are now in my possession. And I have no doubt he also knows the exact meaning of the term "crystalline charcoal iron," *when applied by a thoroughly practical iron-master*, to a certain description of iron. The phrase may not be theoretically correct, as applied by Mr. Thorneycroft, but it is one in almost universal use among practical men, to distinguish one of two descriptions of malleable iron—viz., the granular from the fibrous; and is, moreover, used by "Wootz" himself, in his own letter, when commenting on the changes which the Russian old sable iron undergoes under certain treatment. He says, "All bar iron of the fibrous kind shows, in a more or less marked degree, these alterations from the fibrous to the *crystalline* arrangement, and *vice versa*." Hence, I think, instead of "Wootz" (by his unhandsome critique upon a convertible term) widening the breach between himself as a most learned theorist in iron making, and one of the most eminent practical iron masters of the present day, he ought to have congratulated that gentleman on the successful and ingenious application of such a valuable article as Indian charcoal iron, especially when applied to railway tires and rails—*vide* his own remarks, "The sooner railway companies can view the matter in his light, the better for them; for had they to lay their lines with charcoal bars at 20*l.* per ton, they would, in the end, effect a saving of cent. per cent. upon the present system."

In confirmation of this, see the report in your Journal of 10th Nov., on the durability of some rails made by Mr. Thorneycroft on his patent principle, which have stood the wear and tear at the Paddington station since July, 1847, and are now little worse than when laid down; so that what is wanted from your able ironmaking theorists is not quibbling about the meaning of convertible terms, such as those referred to, but some common sense assistance to *practical men*, that this staple of our country, and one upon which so much depends, may not be trifled with, but treated as a great commercial question, involving, as it evidently does, the interests of a large portion of her Majesty's subjects. If "Wootz" would only pay Mr. Thorneycroft a visit at the Shrubbery Works, he would here have ocular demonstration that all that gentleman had said of his peculiar mode of manufacturing iron is correct. ROBERT OWMAN.

Wolverhampton, Dec. 26.

IRON AND CARBON.

SIR,—I feel greatly obliged to the gentlemen who have noticed my letters; the object I had in view—viz.: that of obtaining the opinion of some of your most talented correspondents—seems in a fair way of attainment. Mr. D. Mushet should not misconstrue my observations, he has done that in reference to cable-bolts, for which purpose, I said, in former letter, that, "instead of having iron an aggregate of innumerable minute fibres, I would have each to consist of one entire solid fibre, which would be the case if the simple pure metal had to be drawn out *per se*." I must also beg leave to correct a remark in "Wootz's" letter, to the effect that I say pure iron will not weld. It certainly will weld if two surfaces are coated with cinder by oxidation and the addition of carbon, or the earthy matter, as sand, to which "Wootz" has alluded. The action of magnetic currents is a convenient way of explaining some difficult questions; but it certainly does not satisfy me as the cause of the formation of fibres in bar-iron. Mr. Mushet refers to some remarks of mine on the slag from blast-furnaces; can he favour me with an explanation of the cause of its transparency? I presume he must admit that it ought to be an opaque mass of fused porcelain, consisting of silica and alumina rendered fusible by the addition of lime. Why is it sometimes in this state, while at others is a perfectly transparent glass? I suspect the great cause of the differences taken of the workings of iron by my opponents and myself may arise from our taking the effect of the atmosphere of a puddling-furnace in opposite lights; while they regard it as oxidising, or at least as de-carbonising, I consider it rather the reverse. It can have an oxidising effect, from the fact of smoke, or flame, being always present in the chimney, showing the presence of either free carbon, or gases containing carbon. I fear this discussion is occupying too much of your valuable space; I will, therefore, intrude with only one more circumstance, as briefly as I can. When puddling iron with anthracite, a water-grate and blast, I had an opportunity of elucidating my views very beautifully and satisfactorily. When no air was blown in over the fire, there was a great body of flame issuing from the chimney, and the furnace did not heat, because the gases passed through without ignition. On admitting air by degrees, the flame outside gradually diminished, until sufficient air for the perfect combustion of the gases being admitted, the flame disappeared, and the heat of the furnace became intense. Under these circumstances the iron had a tendency to burn, or oxidise, and to guard against this I recommended the use of some carbonaceous substance with the iron. In this way very capital bar-iron could be made; and I have no doubt that, by proper attention to some minor details, and the use of very pure carbonaceous matter (perhaps peat charcoal would be the best), iron could be made in Wales equal to the best Russian or Swedish bar-iron.

Dec. 24. T. H. LEIGHTON.

SCIENCE IN THE MANUFACTURE OF IRON.

SIR,—I have scared a rookery. I am sure I apologise for the disturbance. I had endeavoured to state a few plain facts very quietly, with not the least intention of touching the sensitive pride of Messrs. "Wootz," Radley, &c., and not aware they had the faculty of Sir Hudibras, and could

—— like Cerberus, pronounce
A leash of languages at once.

The confusion of Babel must have been a dead calm compared to this torrent of unknown tongues with which I have been the unconscious means of inundating your pages. If these Thebans are a fair specimen of the hangers-on which are found about iron-works, under the name of scientific men, taking on themselves to represent the character of science, there can be no need of the solid reasons I lately advanced to explain why iron-masters are averse to encourage *science*. The clank of the rolling-mill, would, per force, be silenced before the din of such infernal jargon. Yet still there is really something solid and useful, difficult though it may be to believe *it*, in genuine science; and at the risk of hurting still more the corns of these verbal champions, at war with themselves and every one else, I will attempt to state a few more facts. Science has been defined to be a means of remedying the defects of our natural senses. To avoid disturbance, I beg distinctly to state that this definition is not mine; it has been laid down and received as correct by very acute philosophers. This admission will spare any one the trouble of misstating me. Had we a microscopic vision, differently arranged, we could detect the gaseous particles of the elements of air and water, and their true composition would not have been for so many centuries concealed. Some gases which elude the sight are obvious to some other sense; the effects of their passage through water may give them a visible presence, and three principal classes, as extinguishing flame, supplying it, or supporting it, are detected by the test of fire. But the nature of more minute and subtle combinations and characters of bodies, gaseous or solid, require to be ascertained by far more intricate and delicate methods, which demand the greatest accuracy and care in using them, and the greatest precision of language in expressing the inferences derived from them.

It does not appear, therefore, that the disguising of strained notions under long unintelligible words, forms any real part of science. The object is, if possible, to elicit truth more clearly, not to disfigure it in masquerade. It has been found convenient to give the elementary bodies which research has detected distinguishing names, founded on some prominent quality; to secure precision and contrast from words in common use; these names have chiefly been selected from the Greek tongue, which has ever had a copious facility for epithets. But this is an acknowledged evil, and a corruption of our own language. If titles sufficiently distinct and expressive could have been given in plain English, it would in every way have been a great advantage; and we, therefore, find that really scientific men lard their pages with these novelties as little as possible, using them only to express what they mean. Were these titles English every one would appreciate their sense, so that ignorant pretenders, merely by taking a mouthful of them, could not, as we now see done, impose by the attempt to pass off their ignorance for superior wisdom. It is, therefore, plain this jactation of poly-syllabic words is no sure sign of profundity; rather the reverse, or when the word is so long it leaves no space in the head for the idea. Considering the minute and scarcely appreciable character of the details which real science has to decide upon, we find the wisest men most sensible of the difficulty of attaining certain conclusions, expressing themselves with great forbearance on points full of mutability. Radley, "Wootz," and Co. may, therefore, learn that *mere opinion* is of very little value, and that a difficult subject makes very little advance upon the stilts of an *ipse dixit*, or the "*ego et Newtonus*" style.

Any trifle of information that I may possess I am willing to communicate to the best of my ability, if civilly asked for it, not when cavil and contention is the evident object. One would think I had thrown down a challenge to answer all questions, rational or irrational, to all comers. I have taken a good deal of pains with Mr. Leighton, because there is a candour and ingeniousness in his remarks very different from the absurd dictatorialisms of some others, and should much rather deem him in the right than in the wrong, for the subject is really an important one. But as to "Wootz," and his friend Radley (if, indeed, they are not one person), they seem like the Merry-Andrews with the wooden swords, determined to have a slap at every one and at each other. Truth is a thing entirely subordinate to themselves; it is an offence to speak in their presence, and nothing is well said unless they say it. "We are they which ought to speak," privileged to darken counsel by words without understanding.

Mr. Mitchell also appears particularly to have incurred their scientific choler. I know not why, except that he has given a more precise and novel account of facts and combinations in the manufacture of iron than I am aware of the existence of in any other quarter; and I will say, unhesitatingly, that man must be very ignorant of this subject who thinks he can overturn Mr. Mitchell's labours by a jeer or a puerility of expression. It really is distressing on a subject of national importance to see a detail of fair labours for the advancement of truth, invoking into your pages such a dissonant outcry. Accurate science has given economy and power over the creation wherever it has been applied. There are solid and substantial fruits; but what wonder, with such scarecrows as these are in the field, that the practical man should avoid approaching them? The compound eccentricities of thought and language which they brandish, are like a flail wielded by an unskilful thresher; the crack falls upon his own head, instead of the object to which he directs it. Ironmasters require to have something *in* their heads, and need to use them; whilst the rash novice is dangling the unlucky implement against his skull, and crying "See what a fine thing is science!" is it strange that none will follow his uncomfortable example? I have no wish to bring "Ferreus" about my ears; but I think he must have intended "breeches' bag" and "trachea" in his effusion; but if these are misprints, it is no matter. I take it, the essence of this super-science is, that it cannot be understood; therefore, the more unintelligible is the language, the deeper the learning. If it can be shown that the *cinder* bears the same relation to the *fibre* of iron that *sap* bears to the *fibre* of wood, I think Mr. Leighton's theory may be taken as proved, with its supplement of aponeuroses, cellular tissue, and treacle air-cells complete.

Dec. 26. DAVID MUSHET.

MINING INVESTMENTS—HOME AND FOREIGN.

SIR,—Permit me to correct an error in my last letter in your Journal on this subject—what I wrote was, "I have resided many years in Ireland, *not* as a partizan," &c.; whereas by a mistake I am made to say "I have resided in Ireland *but* as a partizan," &c. With respect to the remarks of "A Lover of Fair Play," which appeared in your Journal of the 15th inst., it is unnecessary for me to say another word, for until he proves to the contrary, that investments in foreign mines are *superior* to investments in the home mines, or that the prices of shares, as quoted in your Journal, are incorrect, and that the value of a mine either at home or abroad, is *what it will sell for*, he must admit that he has neither made out a *case*, nor proved any part of my statement to be erroneous. A word or two, however, on parting: "A Lover of Fair Play" has thought proper to *jump* to a conclusion, from the remarks of a *popular writer* on the difference of character between the English and Irish labourer, that the Irish labourer would rather *starve in idleness*, than *work* and support himself by his own exertions. Now, to say the least of it, this is a very *harsh* and unjust assertion. There are many *popular writers*, especially on Ireland, but it does not by any means follow that their ideas or remarks are correct. I am prepared and quite ready to admit, that during the late famine in this country, the Government grants for the preservation of the people were on a most munificent scale, probably unparalleled; but, on the other hand, I am prepared to prove (I was an eye witness to the fact) that the *mode* of application of Government aid—the Board of Works, to wit—was the most scandalous and disgraceful that ever was inflicted on a nation or people; and the system, if persisted in, would have demoralized a "*nation of saints*." Now, let me ask "A Lover of Fair Play" who perform the most laborious work in the docks and other places in London? Are they not, generally speaking, Irishmen? Why do they work hard in London? Simply, because they are paid for their labour? And why do they not work in Ireland? Simply because there is no person to employ them. Would you, Mr. Editor, labour in your vocation, or would "A Lover of Fair Play," or the popular writer he quotes, without the hope of remuneration? I trow not; then why expect another to *do* what you *would not do yourself*?

Allow me to state *a fact*, by way of illustration. At the commencement of the famine in this country a gentleman in Cork had a sum of 30*l.* remitted to him from Singapore, which was to have been gratuitously distributed among the poor of one of the *poorest* and *most remote* localities of this large county. The gentleman in question applied to me on the subject, and I gave it as my opinion that it would be bad policy to distribute the money gratuitously, and that the people should be employed on some useful work. This was readily acceded to. We first thought of making a good pathway across the peninsula which divides Bantry Bay from Dunmanus Bay, and thus open up the district, and enable the people to gain access to peat bogs for fuel, and also sea-sand for manure; but, after a little consideration, we thought a carriage road would be far more beneficial. We accordingly applied for assistance in this useful undertaking to the Board of Works in Dublin, and had a reply, stating that no aid would be given unless the place was first surveyed by an engineer from the board (at the same time engineers were as plentiful in the country as starlings on a frosty morning), the expense of which would be 20*l.* I surveyed the place myself; the sketch was forwarded to Dublin, and we obtained a grant of 35*l.*, and, with local subscriptions, we made up a sum of 97*l.* 10*s.*; and *with that sum* we made a good carriage road over one of the roughest parts of Ireland, and fenced it where required—a distance of two miles. We kept 44 heads of families constantly employed for 11 weeks, and, during that period, supported upwards of 200 souls. We had neither *engineers* nor *overseers*; the work was willingly and ably performed, and remains as a *proof* of how much may be done in this country with a *trifling outlay*; it also gives the *lie direct* to *popular writers*, and others, who assert that Irishmen *will not work when treated like men*. In the immediate locality of the road in question, 10,000*l.* were expended by the Board of Works *in making roads*, but *not one inch* of which *are finished*. These are facts. So much, then, for *popular writers*, and the utter ignorance of Ireland and the Irish displayed by "A Lover of Fair Play."

Mount Gabriel, County Cork, Dec. 21. ANGLO-CELT.

A MINER'S OPINION OF SAFETY FUSE.

SIR,—We observe a letter in your last Journal, under the above head, and signed "Staffordshire," and we wish, through the medium of your columns, to inform your correspondent where he, or any one else, may get *good* safety fuse. We have never sent any fuse into Staffordshire, knowing the prejudice that existed there against its use, but we shall be very glad to furnish your correspondent with samples of our fuse, if he will tell us where to send them, which we will warrant to stand any fair test, and to be perfectly safe in use. Though we do not doubt that there is much truth in "Staffordshire's" observations as to the bad quality of the fuse sent into his county, we would call his attention to the fact, that there may be failures with fuse as there may be with anything else, not attributable in any way to the article, but to a want of precaution in the miner. We do not wonder at the sinker's resolution, rather to brave the wrath of the magistrates than to expose himself to danger so great as that from which he escaped; but we wish to assure him that he need neither compromise his honesty by stealing straws, nor risk his life by using bad fuse, for we will supply him fuse, which we will warrant to be of the very best material and manufacture. W. BRUNTON & Co.

Penhillick Fuse Factory, Pool, Cornwall, Dec. 26.

WEDNESBURY.

SIR,—In one of your correspondent's communications, last week, reference was made to the recent terrible catastrophe at Wednesbury, which the *natives* call Wedgebury. The whole earth in that village and vicinity may be said literally to tremble beneath your tread; it is full of pitfalls, and so insecure, that when you go to bed at night it is a problem whether you may not have to make your escape by the attic in the morning. I felt all that insecurity one night I passed at the inn there. Many of the houses are rent from top to bottom, others have sunk more or less deep, while not a few are tottering to their fall; some, I believe, have been swallowed up. I know of no question more loudly calling for Government inquisition than that dangerous locality. It should be promptly "tabooed."

Portland-place, Hull, Dec. 27. J. MURRAY.

FRACTURE OF TELEGRAPHIC WIRES.

SIR,—The recent rupture of the telegraphic wires between London and Birmingham, and at Manchester, is a very serious evil, and one which ought to be scrutinised and investigated. The fracture has been ascribed to *contraction by frost*; I frankly confess that this is to my mind a very questionable solution. Should it prove to be so, it is obvious that a similar effect would be produced from the opposite cause—an elongation from the temperature of summer, &c. There are two obvious modes of providing for the contingency—a spiral coil at definite lengths, on the principle of the piston. A curious and important question seems to me to arise from the phenomenon cited. Is the *tension*, &c., of the galvanised wire affected by the contact of the zinc? I freely avow that I think so. I have often found in my voltaic researches, when using Dr. Wollaston's triads (double coppers), that when the wood which insulated the zinc had slipped from its place, and the copper came into contact with the zinc, that the former has become as *brittle as tinder!* Now, the telegrapic wire is under precisely the same circumstances, and in both cases a current of electricity has passed through. *Gutta percha* is the only safe insulator, as well in reference to *extremes of temperature* as to electricity; and as the electro-telegraph is disturbed in its present mode of suspension by the electric condition of the atmosphere, and its indications rendered equivocal, the only remedy is the use of copper wires, covered with gutta percha, passing through earthenware tubes, and, as in Prussia, *laid under ground*. This is an alternative which, I believe, must sooner or later be adopted.

Portland-place, Hull, Dec. 27. J. MURRAY.

SMOKE INTERCEPTED.

SIR,—It appears that Mr. Maratuch has recommended successfully the application of three screens of wire gauze in the chimney, for the purpose of preventing a deposit of soot, by intercepting the carbonaceous matter of the smoke. More than six years ago I proposed to a builder in Newport Pagnell, Bucks, the self-same thing, and for a similar purpose. The fact and circumstance can be substantiated at any time, by a reference to parties.—J. MURRAY: *Portland-place, Hull, Dec.* 24.

EXPLOSION AT LOUTH.

SIR,—I am not sure that the materials which enter into the composition of the proposed explosive signals for railways are known; and, if so, the fearful catastrophe at Louth must remain a mystery; but, at any rate, there does not seem to have been adopted by the late Mr Armitage that caution and care which would be naturally suggested to a scientific chemist. The chalkstone alone often suffices to dry explosive compounds; *an oven* certainly would be the very last resource, and the water bath seems not to have been thought of! If the xyloidin of Pelouze had been one of the ingredients, what a risk had been incurred, when the gun-cotton "stoves" at Faversham were literally blown into dust at a temperature of 110° Fahr.! If, again, fulminating mercury had been used, danger was equally imminent, as its ignition is determined at a comparatively low temperature, and is altogether equivocal. I had proposed it as a substitute for the former percussion powder in the fowling-pieces, but from its susceptibility of ignition, it would be well to have the cap of a non-conducting material, rather than of metal. J. MURRAY.

Portland-place, Hull, Dec. 24.

Errata.—"Peat Charcoal."—For "affects," read *effects* the destruction; for "sceptic," read *septic*; for "fested," read *fistid*.

BANWEN IRON COMPANY.—The Master in Chancery, Kinderley, has appointed Mr. H. Ardon, accountant, to proceed with the winding up of this company's affairs, and to call in the creditors to prove their debts, or they will otherwise be precluded from the recovery thereof.

The railroads completed in the United States are 8500 miles—in progress, 400 miles more.

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THURSDAY ..... Zoological—11, Hanover-square ..... 3 P.M.
Antiquaries—Somerset-house ..... 8 P.M.
FRIDAY ..... Botanical—20, Bedford-street, Covent-garden ..... 8 P.M.
SATURDAY ..... Asiatic—5, New Burlington-street ..... 2 P.M.
Westminster Medical—17, Saville-row ..... 8 P.M.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY ..... Canada Company—offices, at One.
Galvanised Iron Company—London Tavern, at Two.
TUESDAY ..... Royal Santiago Mining Company—offices, at One.
Prudential Mutual Assurance Company—offices, at Eleven.
London Docks Company—offices, at One.
WEDNESDAY .. Royal Santiago Mining Company—offices, at One.
Callington Mining Company—offices, at Two.
Sovereign Life Assurance Company—Thatched House Tavern, at One.
Phœnix Gas Company—offices, at One,
FRIDAY ..... Imperial Fire and Life Insurance Company—offices, at Twelve.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

SOUTH AUSTRALIAN COMPANY.

A general meeting of proprietors of this company was held yesterday (Friday) at the office, in New Broad-street, City, for the purpose of receiving a report from the directors. J. R. TODD, Esq., in the chair.

Mr. M'LAREN (the manager) read the minutes of the last meeting, which were confirmed, and also the supplementary report, the substance of which is comprised in the following extracts:—

It is necessary to remind the shareholders that the reports presented at this season of the year must always be imperfect, in consequence of deficiency of information from the colony; and the want of various documents and valuations, which can only be correctly prepared once in the year. The present partial one refers to the period from 31st October, 1848, to 30th April, 1849. It is gratifying to the board to state, that the expectation which they have repeatedly expressed, of increased income from our rent rolls, has been fully realised. The addition to our rental, secured during these six months, is as follows:—

Increase to the annual rental of the town property	£281	12	0
Ditto ditto port buildings	313	0	0
Ditto ditto country lands	916	17	0—£1511 9 0
Increase in the net receipts of the wharf during the same period			266 6 1
Total			£1777 15 1

Besides, by despatches to the 24th August, information has been received from the colonial manager of further leases effected during the preceding four months, as follows:—

Country lands, 3009 acres, annual rental (being nearly 5s. 8d. per acre av.)..	£851	14	0
Town lands, rather less than 4 acres, for 21 years, chiefly on building leases	179	10	0
Port lands, of small rear allotments	13	8	0
Total	£1044	12	0

Previously to these last mentioned leasings, there remained one-half of the country lands unlet, and upwards of 100 town acres unoccupied. As it was of importance to interest as many of the colonists as possible in confirming the present site of the port, Mr. Giles has judiciously disposed of several allotments there, previously laid out for sale, for which he has secured inventory rates. He has thus also obtained requisite funds for extending the wharf, and otherwise improving our valuable property there, without encroaching, for those objects, on the income derived from other sources.

There is reason to believe that, by this time, operations have commenced for forming a railroad from Adelaide to the port, and as the terminus is likely to be on our land, in the rear of the extended wharf, our property there will become still more valuable. By our late advices we learn that Mr. Giles had, in consequence, made some very advantageous sales of small allotments, at a rate rather exceeding 2000*l.* per acre, and was about to lay out others. Fortunately, we have upwards of 100 acres there, with a continuous line of frontage to the harbour, upwards of a mile long.

The portion of last year's clip of wool, which was sold after the annual meeting, did not bring quite so good prices as that sold in May. The net proceeds of the wool amounted to 5662*l.* 1s., as against 3624*l.* 6s. 7d. of the preceding year. The market has decidedly improved, and the prospects for next year are very encouraging. The advance in the price of wool had a cheering effect on the colonists. Mr. Giles says, in one of his late despatches, if "it be maintained it will greatly expedite the sale of our flocks after the next shearing; should the directors views remain unchanged, that it will be for the company's interest to dispose of this property." The directors have confirmed their former instructions to dispose of the sheep, whenever a sale can be effected at saving prices. The sales of sheep, and value of those killed for rations during the six months preceding the 30th April last, amount to 1232*l.* 7s. 2d. The mining operations of the company continue to be carried on, to a very limited extent, and on the most cautious principles.

Mr. Giles, with the approbation of Captain Remfry, had made an arrangement with Messrs Thomas, who have erected smelting works at Kanmantoo, agreeably to which, all our ores for two years are to be smelted by them, and returned to us in copper. This will give a value to low ores, which could not have paid freight and charges to England. Mr. Giles had also sold a quantity of ore to a smelting company in Van Diemen's Land, and had, previously to the 18th April, delivered to them 25 tons, at 12*l.* 13s. per ton. The directors have studiously avoided exciting sanguine expectations as to the probable produce of our mineral lands, and, acting in this spirit, while communicating the following information, they think it necessary to caution the shareholders against attaching undue importance to it. Gold has been found in several parts of the company's lands. A scientific practical mine surveyor of high character has assured Mr. Giles of this fact, the result of his own examinations—has shown Mr. Giles specimens of the gold, and stated that he should consider himself remunerated for superintending such workings with one-fifth part of the net profits derived therefrom. This information was transmitted to the board by Mr. Giles, so recently as on the 1st August last. Emigration still steadily continues, both of the labouring classes, and of those possessed of capital. Increased facilities (much called for by the colonists) will have been afforded ere this, for legitimate banking business, by the establishment in Adelaide of a branch of the Union Bank of Australia.

The CHAIRMAN said, in rising to move the adoption of the report, it was hardly necessary for him to make any observations, as the advices up to a later period were equally favourable. Although difficulties attended the communications by Singapore, Batavia, or China, yet the directors occasionally got copies of their letters within a period of three months. (Hear.) The only thing to be regretted was that these abstracts were not so complete or detailed as might be given if the vessels had arrived. He thought they could agree, as was stated in the report, that they had progressed as fairly and as prosperously as could be expected. The directors hoped to be able soon to get rid of their flocks without loss; and from the progress making in their mining operations, there would be a chance of letting the mines to others, by whose activity, capital, and industry, they might benefit more than by their own efforts. In conclusion, he would beg to move that the report of the company's operations, as now read, be adopted as that of the South Australian Company; and that the same be printed and circulated under the direction of the board.

The Rev. Mr. LAURIE said, he would beg leave to second the adoption of the report, as he conceived that the directors had been doing everything in their power to promote the interests of the company. He thought the fair and candid manner in which everything was stated would naturally inspire the shareholders with a confidence that their affairs were in safe hands. This was one of their half-yearly meetings, which he thought was a desirable thing in itself; and he was still more gratified to find that there should have been a favourable report even within the last three months.

Mr. MILLER observed that he was happy to find that there was an increase of revenue arising from their rental of about 2000*l.* It would have been gratifying to him to have heard something of their mining operations; he meant as to profit and loss. Being unwilling to take up the time of the meeting, he would simply ask how long they had been engaged in mining operations; secondly, what amount of money had been expended in them; and, thirdly, what amount had been realised from the mines for the account of the shareholders? (Hear, hear.)

The CHAIRMAN said, the reason of these accounts not being given was that they had not yet arrived for the directors to give the detail required, to show what must appear against their mining operations; the total amount of the money devoted to their mineral lands, taking everything, including purchase, interest of money, &c., was 31,000*l.*

Mr. MILLER would ask, during what period that money had been employed?

Mr. M'LAREN replied, since December, 1845.

The CHAIRMAN said, their land was worth something, independent of the surface, from the minerals it contained; they could also let the surface distinct from the minerals; and it would be seen by the report that the directors were prepared to let this land.

Mr. MILLER would ask, what prospect they had of receiving back the money expended?—The CHAIRMAN thought, a very good prospect.

The Rev. Mr. TIMPSON thought the expenditure alluded to ought to be looked upon as an investment. (Hear, hear.)

Mr. DIVETT, M.P. (a director), would remind the proprietors that it was part of the policy of this company, and ratified by the shareholders, never to sell an improving property, the result of which would be, that in a short time they would get a large price for that which was at present of an increasing value. If this resolution had prevailed some years before, they would not at present be getting 5s., 6s., or 7s. an acre per annum for land, but, on the contrary, would have sold the property for 25s. or 30s. an acre. (Hear, hear.) He was of opinion that from the course the directors had been pursuing, the company would get a fair return from their mineral land, and the whole object of the expenditure on it was to put the property on a safe foundation.

The Rev. Mr. TIMPSON observed that the increase of rent and wool had made an addition of 5000*l.* in one year. If that continued, he hoped, by the next time they met, the directors would be able to show a net income of 6000*l.*, 7000*l.*, or 8000*l.* He would ask the extent of their country land?—The CHAIRMAN replied about 56,800 acres of country land, 130 acres of town land, and 110 acres of port land.

A PROPRIETOR asked if any preparations were made for the reception of emigrants by the vessels which were weekly departing?—Mr. DIVETT, M.P., believed that every preparation was being made for receiving emigrants, and making them comfortable on their arrival.

The CHAIRMAN said the large emigration had caused a trifling reduction in the price of labour, but all workpeople found employment on their arrival in South Australia.

A PROPRIETOR asked what they were now getting for their surface land?—Mr. DIVETT, M.P., replied, that for some of it they were getting 4s. an acre; that was, of course, independent of its mineral value. The custom of smelting now introduced into the colony would give increased value to all mineral lands. (Hear, hear.)—The report was then adopted unanimously.

A conversation then ensued, in which Mr. Miller, Mr. Watson, Mr. White, Mr. Laurie, and other proprietors, took part; and a resolution was proposed, requesting the directors to discontinue all mining operations as soon as possible.

The CHAIRMAN reminded the proprietors that it was the intention of the directors so to do, and he thought it would be inexpedient to pass any resolution to that effect.—Mr. MILLER and Mr. WATSON persisted in putting the resolution, but it was negatived by the meeting, having been supported by only one shareholder, besides the mover and seconder.

On the motion of Mr. MILLER, seconded by the Rev. Mr. TIMPSON, a vote of thanks was passed to the chairman and directors, and the meeting separated.

THE CALEDONIAN RAILWAY.—The committee of investigation into the affairs of this company have made a report, in which they state, that it is necessary for the interests of the company, that negociations should be entered into for reducing the guarantees given to other companies; that the purchases which have taken place in shares of other companies are irregular; but believing that the directors entered into them with the *bond fide* intention of benefiting the company without any reference to their own private interests, they only recommend that the directors should retire, and that the company should adopt the purchases, under certain conditions. With regard to the accounts the committee state, that the balance sheet, under date of June 30th last, shows a balance against the company of 387,893*l.*, whereas in truth it was 690,049*l.* The committee conclude by recommending that arrangements should be entered into for an amalgamation with the Edinburgh and Glasgow Company; that the number of directors be reduced to nine; that an independent manager of the line be appointed, with a salary of 1000*l.* per annum; that the capital account be at once closed; and a regular system of monthly audit of the accounts established.

STEAM TO INDIA AND CHINA, VIA EGYPT.—Regular MONTHLY MAIL (steam conveyance) for PASSENGERS and LIGHT GOODS to CEYLON, MADRAS, CALCUTTA, PENANG, SINGAPORE, and HONG-KONG.

THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY 50 BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the ABOVE PORTS by their steamers—starting from Southampton on the 20th of every month; and from Suez on or about the 19th of the month.

BOMBAY.—Passengers for Bombay can proceed by this company's steamers of the 29th of the month, to Malta, thence to Alexandria by her Majesty's steamers, and from Suez by the Honourable East India Company's steamers.

MEDITERRANEAN.—MALTA—On the 20th and 29th of every month. CONSTANTINOPLE—On the 29th of the month. ALEXANDRIA—On the 20th of the month.

SPAIN AND PORTUGAL.—Vigo, Oporto, Lisbon, Cadiz, and Gibraltar, on the 7th 17th, and 27th of the month.

For plans of the vessels, rates of passage-money, and to secure passages and ship cargo apply at the company's offices, No. 122, Leadenhall-street, London; and 47, High-street Southampton.

LOANS ON DEBENTURES.—The CALEDONIAN RAILWAY COMPANY are prepared to RECEIVE TENDERS OF LOANS, in sums not less than £500.—Applications to be made or addressed to this office.

By order,
125, George-street, Edinburgh, Dec. 1, 1849. D. RANKINE, Treasurer. 51

RAILWAY CARRIAGE AXLE, LOCOMOTIVE AND MARINE ENGINE BEARINGS, of STIRLING'S PATENT METAL.—These ALLOYS are found to be SUPERIOR to every other COMPOSITION of METAL for the ABOVE PURPOSES, and are in EXTENSIVE USE on RAILWAYS and in MARINE and GENERAL ENGINES. They do not heat in friction, nor injure the axle or shaft, and they wear much longer, while they are cheaper, and in every respect more economical than any other metals.

CASTINGS of all DESCRIPTIONS, for GENERAL MACHINERY, to be obtained of
MEARS AND CO.,
ORDNANCE AND BRASS FOUNDRY AND PATENT METAL WORKS, 52
FIELDGATE-STREET, WHITECHAPEL.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES AND CLOCKS.

E. J. DENT, 82, Strand; 33, Cockspur-street; 34, Royal Exchange (clock tower area) Watch and Clock Maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £5 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.

DENT'S PATENT DIPLIEDOSCOPE, 53
or Meridian Instrument, is now ready for delivery.—Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

THE PATENT OFFICE AND DESIGNS REGISTRY, *No. 210, STRAND, LONDON.*

INVENTORS will receive (gratis), on application, the OFFICIAL CIRCULAR OF INFORMATION, detailing the eligible course for PROTECTION of INVENTIONS and DESIGNS, with Reduced Scale of Fees.

Messrs. F. W. CAMPIN and CO. offer their services, and the benefit of many years experience, in SECURING PATENTS and REGISTRATIONS OF DESIGNS, with due regard to VALIDITY, economy, and dispatch—assisted by scientific men of repute.

Also, in MECHANICAL and ENGINEERING DRAWINGS, whether connected with Patents, Railways, or otherwise, by a staff of first-rate draftsmen.

Application personally, or by letter, to F. W. Campin and Co., No. 210, Strand (corner of Essex-street).

SEWERAGE OF LONDON.—The ATTENTION of the COMMISSIONERS appointed to determine upon the MOST EFFICIENT MATERIAL for the CONSTRUCTION of the SEWERS OF LONDON, is particularly directed to the ASPHALTE OF SEYSSEL, which more than any other material is applicable to the CONSTRUCTING and INTERNAL COATING of BRICK CULVERTS and OTHER CHANNELS for DRAINAGE.

The experiments made by the Royal Artillery on the embrasures of Plymouth Citadel, constructed of Seyssel Asphalte Brickwork, under the orders of the Hon. Board of Ordnance, have fully proved the superiority, adhesiveness, and strength of Seyssel Asphalte over all other cementitious compositions. A printed account of these experiments can be had on application to I. FARRELL, Secretary,
Seyssel Asphalte Company—"Claridge's Patent"—Established 1838. 55

Note.—The application of the Asphalte of Seyssel is specially recommended by the Commissioners on the Fine Arts for covering the ground line of brickwork in marshy situations, and it has been suggested that it would be peculiarly applicable for covering the *areas* of closed *grave yards*, and for the construction of *catacombs*.

CHOLERA AND BOWEL COMPLAINTS.—Thousands have been saved by Dr. MACANN'S GRAND ELIXIR and TINCTURE. It was successfully prescribed by the late Dr. Macann, when the cholera raged at Bilston, in 1832, and has effected more cures in 1849 than all other medicines. One dose is generally sufficient to stop vomiting, purging, cramp, &c., and every family should have a supply in the house ready. The Grand Elixir is sold in bottles, 2s. 9d. and 11s. each, and the Tincture in bottles, 13½d. each, duty included.—Prepared only by THOMAS WHITE, chemist, Bilston, and sold by him, and by Barclay and Sons, 95, Farringdon-street; Drew, Heyward, and Barron, Bush-lane, Cannon-street; Hannay and Dietrichsen, 63, Oxford-street, London.—Wholesale and shipping agent, Mr. Wm. Bailey, Wolverhampton.—Beware of counterfeit preparations, and see that the Government stamp on each bottle has the signature of "T. WHITE," as none else is genuine. 56

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Bate's West Hartley 15—Buddle's West Hartley 15 6—Carr's Hartley 15 6—Davison's West Hartley 15 6—East Adair's Main, 13 3—Hasting's Hartley 15 6—Hedley's Hartley 13—North Percy Hartley 15—New Tanfield 14 —Old Tanfield 13 6—Ord's Redheugh 15—Ravensworth West Hartley 15 and 15 6—South Peareth 14—Tanfield Moor 15—Tanfield Moor Bute's 14—Walker Primrose 13 6 and 13 9—West Adair's 14—West Hartley 15 6—West Wylam 15 6—Wylam 16—Wall's End Acorn Close 17 3—Brown's 16 3—Brown's Gas 13 3—Bensham 16 3—Bewicke and Co. 17 and 17 6—Burraton Killingworth 17—Gosforth 17—Hedley 17—Harton 17—Hotspur 16 3—Heaton 17—Killingworth 17—Morrison 17—Northumberland 16 3—Original Gibson 16 9—Pegreth 14—Percy 16 3—Eden Main 17 6—Lambton Primrose 17 6—Bell 17—Belmont 17 6—Hetton 18 6—Haswell 18 9—Hutton 17—Heselden 17—Jonassohns 16 6—Lambton 18 3—Lumley 17 and 17 3—North Hetton Lyons 17 9—Russell's Hetton 18 3—Stewart's 18 6 and 18 9—Caradoc 17 9—Cassop 17 9—Denison 16 9—Heugh Hall 17 3 and 17 6—Kelloe 18—North Hartlepool 16 3—South Kelloe 17 3—South Hartlepool 17 6 and 17 9—West Belmont 17 3—West Hetton 17 3—Whitworth 15—Adelaide Tees 17 9—Cowndon Tees 17—Maclean's Tees 16 6—Seymour Tees 17—South Durham 17—St. Helen's Tees 16 6—Tees 18 9—West Cornforth 16 6—Woodyfield 14—Cowpen Hartley 15 6—Derwentwater Hartley 15 6—Nixon's Merthyr and Cardiff 21 3—Sidney's Hartley 15 6—Snapethorpe 16 6.—Ships at market, 326; sold, 173.

WEDNESDAY.—Carr's Hartley 15 6—Davison's West Hartley 15 6—Holywell 16 9—New Tanfield 14 6—Tanfield Moor 15—West Adairs 14—Wylam 15 9—Wall's-End Elm Park 17—Percy 16 3—Walker 16 9—Bell 17—Belmont 17 6—Braddyll 18—Hetton 18 6—Haswell 18 9—Jonassohns 16 6—Lambton 18 to 18 3—Lumley 17 3—Russell's Hetton 18 3—Stewart's 18 6—Caradoc 17 9—Cassop 17 9—Kelloe 18—Whitworth 15—Adelaide Tees 17 9—Cowndon Tees 17—South Durham 17—Tees 18 9—Woodyfield 14—Cowpen Hartley 15 6—Nixon's Merthyr and Cardiff 21.—Ships at market, 154; sold, 51.

FRIDAY.—Bate's West Hartley 15—Carr's Hartley 15 6—Davison's West Hartley 15 6—Hasting's Hartley 15 6—Holywell 17—North Percy Hartley 15—Ravensworth's West Hartley 15 6—South Peareth 14—Tanfield Moor 15—Tanfield Moor Bute's 14—Walker's Primrose 13 6—West Adair's 14—West Hartley 15 6—West Wylam 15 6—Wylam 15 6—Wall's-End Bell and Brown 17—Brown's 16—Brown's Gas 13—Bewicke and Co. 17 6—Elm Park 17—Gosforth 17—Heaton 17—Hilda 16 6—Millbank 14—Morrison 17—Northumberland 16—Original Gibson 16 6—Percy 16 3—Riddell 17—Eden Main 18—Lambton Primrose 17 9—Bell 17 6—Belmont 18—Hetton 18 9—Haswell 18 9—Hutton 16 9—Jonassohn's 16, 6—Lambton 18 3—Lumley 17 6—Caradoc 18—Denison 16 9—Heugh Hall 17 6—West Hetton 17 6—Whitworth 14 9—Adelaide Tees 18—Seymour Tees 17 6—St. Helen's Tees 16 6—Tees 18 9—Woodyfield 13 9—Cowpen Hartley 15 6—Derwentwater Hartley 15 6—Nixon's Merthyr and Cardiff 21 6—Sidney's Hartley 15 6.—Ships at market, 130; sold, 61.

WARRANTED SAFETY FUSE.—W. BRUNTON & CO. beg to inform Mine Agents, Contractors, and Merchants, that having completed their Machinery for the MANUFACTURE of the ABOVE ARTICLE, they are enabled to offer FUSE of a very superior quality, and at considerably reduced prices.

W. B. & Co. can SUPPLY FUSE in ANY LENGTHS that may be required.

Penhellick Fuse Factory, Pool, Truro, Cornwall. 57

TESTIMONIALS.

Messrs. W. BRUNTON & Co. *North Pool Mine, Nov. 27, 1849.*

GENTLEMEN,—We have had your Safety Fuse in constant use during the last seven months, and have much pleasure in expressing our own satisfaction with it, and in being able to tell you that we have not had a single complaint of your Fuse made by any of our men during the whole period—though they are particularly instructed to return any bad materials which may be supplied to them.

JAMES EVANS, Manager, FREDERICK EVANS,
JOHN NANCARROW, HENRY JAMES.

Messrs. W. BRUNTON & Co. *Tincroft Mine, Nov. 27, 1849.*

GENTLEMEN,—Since last March, when you commenced manufacturing Safety Fuse, we have had Fuse of your make in daily use in all parts of our mine, and can with strict impartiality state that the article supplied by you has been excellent. In proof of this we may mention, that during the whole of that time we have not had a single accident of any description.

PETER FLOYD, Manager, JOHN THOMAS,
THOMAS STAINSBY, HENRY HOCKEN,
THOMAS LEAN, RICHARD MARTIN.

Messrs. W. BRUNTON & Co. *Wheal Agar Mine, Nov. 28, 1849.*

GENTLEMEN,—There has been a good deal of your Fuse used at our mine, and we can safely pronounce it to be as good an article as we ever saw.

ALEX. EUDEY, Manager, JOSEPH EUDEY.

Messrs. W. BRUNTON & Co. *South Roskear Mine, Nov. 29, 1849.*

GENTLEMEN,—Your Fuse is a capital article, so far as our experience of it goes. It is well made, and certain in its operation. The men have brought no complaints of it, nor has a single accident occurred with it. WILLIAM THOMAS, JOHN DUNKIN.

Messrs. W. BRUNTON & Co. *North Roskear Mine, Nov. 30, 1849.*

GENTLEMEN,—All the Fuse you have sent to this mine, during several months past, has been as good as we have ever had from the other Fuse factories. There has been no fault found with it, nor has there been any accident in using it.

JOSEPH VIVIAN, Manager. JOHN HODGE.

Messrs. W. BRUNTON & Co. *Cook's Kitchen Mine, Nov. 29, 1849.*

GENTLEMEN,—We very cheerfully give our testimony to the good quality of your Fuse—for eight months we have used it, and no accident has occurred.

JOSEPH VIVIAN, Manager, JOHN IVEY,
W. G. HILL, RICHARD BENNETTS,

Messrs. W. BRUNTON & Co. *Carn Brea Mine, Nov. 29, 1849.*

GENTLEMEN,—We have used 9000 coils of your Fuse in our mine in the course of the last eight months; and have pleasure in stating that not a single case of accident has arisen therefrom, and we consider your Fuse as good as any that is made.

R. H. PIKE, Purser, ABSALOM BENNETTS,
JOHN LENTEN, } Managing JOHN VIVIAN,
JAMES MINERS, } Agents. JOHN JAMES,
WILLIAM ROBERTS, JOHN DAW.

Messrs. W. BRUNTON & Co. *Penhellick Fuse Factory.*

GENTLEMEN,—We have used, and are still using, your Fuse, and have no hesitation in expressing our conviction that it is, in all respects, entitled to the character of *Safety* Fuse—being as good an article, and as safe in use as any we have seen.

WILLIAM JEFFERY, } Lanarth Mine.
JOSEPH MICHELL, }
WM. H. VERRAN, East Wheal Fortune.
WILLIAM WILLIAMS, Manager, } Wheal Friendship Mine.
FRANCIS BENNETTS, }
JAMES WILLIAMS, }
JOSEPH PEARSE, }
FRANCIS KENT. }

Messrs. W. BRUNTON & Co. *Prestonpans Colliery, Edinburgh, Sept. 17, 1849.*

GENTLEMEN,—The miners inform me that the Fuses are of excellent quality, and have not lost a single shot since the commencement; while, with some of a very similar appearance we used before, nearly half the charges missed fire. JOHN GRIEVE.

BRITISH MINING INTERESTS.

TESTIMONIAL TO MR. J. B. SHARP, OF LONDON.

Some Gentlemen, who are fully aware of the heavy losses sustained, and the expenses incurred by Mr. Sharp, in his opposition to the "COPPER AND LEAD DUTIES' BILL," for the removal of the protecting Duties upon those Metals and their Ores, during the entire Session of 1848, have resolved on making this APPEAL to all classes interested in those questions, to mark their sense of Mr. Sharp's able, assiduous, and persevering efforts for the protection of British Mining Industry.

From the 18th February, when Lord John Russell first announced the intention of Government to remove that protection from our mineral products, down to the 5th September, the very last day of the Session—when the Royal Assent was given to the Bill by the Queen in person—it is within the knowledge of the parties making this statement, that Mr. Sharp laboured without cessation; for the first two months of that period, in preparing information and papers for Members; and documentary evidence to be brought before the Select Committee determined to be asked for; and, upon the refusal of Ministers, on the 17th of April, to grant a Committee of Inquiry, then, in organising the most strenuous opposition, in both Houses of Parliament, to the progress of the Bill in every stage.

It is, also, within their knowledge, that the documents and information which Mr. Sharp drew up, collected at home and abroad, and combined for those various purposes, are so voluminous, as almost to suggest the belief, that it was beyond the power of any single individual to accomplish so heavy a task; and which, they are persuaded, could only have been accomplished by the most unremitting attention.

Without—as the Gentlemen making this statement quite understand and believe—without the slightest personal or pecuniary interest in any mine or mining property in existence, but on public grounds alone, did Mr. Sharp devote all his time and his energies, in the indefatigable manner which they have described, to serve the interest of the British Miner; sacrificing every other object to that cause. The consequence was, as they are also perfectly convinced, that, between the losses which he sustained, and the expenses which he incurred, in carrying on his measures during a period of nearly seven months—every shilling of which expenses (in London) was defrayed from his own funds—he was a *direct loser* to the full extent of *one thousand pounds*, and collaterally and prospectively of much larger amounts.

Mr. Sharp's assent to this Appeal being publicly announced, has been, with difficulty, obtained by the Gentlemen who have thus interested themselves in the matter. They do not feel themselves of sufficient importance, in the scale of society, to put their names prominently forward; but they consider facts of much more importance than names; and they are quite impressed with the belief, that very few in the Mining Districts, or otherwise interested in the subject, have been at all aware, even of the name of the party who thus laboured so long and so earnestly for their protection. Those exertions, however, all the County and Borough Members of the Western Counties, besides numerous others, Peers and Members, who supported the cause in both Houses of Parliament, they are satisfied will, if referred to, most readily and distinctly admit.

They cannot doubt, therefore, that when the extraordinary and unflinching efforts which Mr. Sharp made, for so long a period, the large losses which he sustained in consequence, and the heavy expenses that he incurred, are known to the several classes connected with the mineral properties of the country, this, their plain and unpretending appeal, will be promptly responded to, by those interested coming forward to confer upon him such a Testimonial, as shall, upon the simplest principles of justice, remunerate him, at the least, for the direct sacrifices which he thus made on their behalf. And they can only attribute to the want of a more extensive knowledge of those exertions, and of the party who made them, the fact that, within the fourteen months which have elapsed since the close of his labours in Parliament, he has not received, altogether, an amount equal to the sums which he actually disbursed, nearly a year and a half ago, in the prosecution of those labours.

Amounts already subscribed in Cornwall.

The Right Honourable the Earl of Falmouth	£ 25	0	0
The Right Honourable Lady Basset	10	0	0
Sir Charles Lemon, Bart., M.P.	10	0	0
E. W. W. Pendarves, Esq., M.P.	10	0	0
W. H. Pole Carew, Esq., M.P.	10	0	0
T. J. A. Robartes, Esq., M.P.	10	0	0
Joseph Thomas Treffry, Esq.	100	0	0
The Reverend Canon Rogers	10	0	0
John Learle Tremayne, Esq.	5	0	0

Contributions may be made at the undermentioned Bankers, who have kindly consented to receive the same—namely:

In London	Messrs. Barclay, Bevan, and Co., Lombard-street.
	Messrs. Williams, Deacon, and Co., Birchin-lane.
	Messrs. Praeds, Fane, and Co., Fleet-street.
	Messrs. Ransom and Co., Pall Mall East.
Liskeard	Messrs. Robins, Foster, and Co.
Launceston	Messrs. Robins, Foster, and Co.
Bodmin	The Devon and Cornwall Banking Company.
St. Austell	The Devon and Cornwall Banking Company.
Redruth	Messrs. Tweedy, Williams, and Co.
Camborne	Messrs. Willyams and Hodge.
Helston	
St. Columb	
Truro	Messrs. Tweedy, Williams, and Co.
	Messrs. Willyams and Co.
Falmouth	Messrs. Tweedy, Williams, and Co.
Penzance	Messrs. Bolithos, Sons, and Co.
St. Ives	Messrs. Bolithos, Sons, and Co.
Plymouth	The Devon and Cornwall Banking Company.
Devonport	The Devon and Cornwall Banking Company.
Exeter	The Devon and Cornwall Banking Company.
Tavistock	The Devon and Cornwall Banking Company.
Columpton	The Devon and Cornwall Banking Company.
Kingsbridge	The Devon and Cornwall Banking Company.
Newton Abbot	The Devon and Cornwall Banking Company.
Totnes	The Devon and Cornwall Banking Company.

Communications may be addressed to the *Honorary Secretary*, Mr. ROBERT NEALE, 4, Red Lion-square, Bloomsbury, London.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their offices, No. 26, FLEET-STREET, where all communications are requested to be addressed. [*Dec. 29, 1849.*